

L-2022-185 10 CFR 50.90 10 CFR 50.54(q)

U. S. Nuclear Regulatory Commission ATTN: Document Control Desk Washington, DC 20555-0001

Re: Florida Power & Light Company

St. Lucie Units 1 and 2, Docket Nos. 50-335, 50-389 Turkey Point Units 3 and 4, Docket Nos. 50-250, 50-251

NextEra Energy Seabrook, LLC Seabrook Station, Docket No. 50-443

NextEra Energy Point Beach, LLC Point Beach Units 1 and 2, Docket Nos. 50-266, 50-301

Supplement to License Amendment Request for Common Emergency Plan Consistent with NUREG-0654, Revision 2

#### References:

- 1. Florida Power & Light Company letter L-2022-160, "License Amendment Request for Common Emergency Plan Consistent with NUREG-0654, Revision 2," October 4, 2022 (ML22278A031)
- NRC Letter, "Point Beach Nuclear Plant, Units 1 and 2; Seabrook Station, Unit 1; St. Lucie Plant, Unit Nos. 1 and 2; and Turkey Point Nuclear Generating Unit Nos. 3 and 4 – Supplemental Information Needed for Acceptance of Requested Licensing Action RE: Amendment Request for Common Emergency Plan (EPID L-2022-LLA-0146)," November 22, 2022 (ML22311A558)

In Reference 1, Florida Power & Light Company, acting on behalf of itself and as agent for NextEra Energy Seabrook, LLC and NextEra Energy Point Beach, LLC submitted a license amendment request to change the emergency plan for each site. Specifically, the proposed amendment would adopt a new fleet common emergency plan with site-specific annexes.

In Reference 2, the NRC staff requested supplemental information to enable the staff to make an independent assessment regarding the acceptability of the proposed amendment request. The enclosures to this letter provide the requested information.

This supplement does not alter the conclusions in Reference 1 that the proposed change does not involve a significant hazards consideration pursuant to 10 CFR 50.92, and there are no significant environmental impacts associated with the change.

This letter contains no new or revised regulatory commitments.

If you should have any questions regarding this submittal, please contact Steve Catron, Fleet Licensing and Regulatory Compliance Director, at 561-304-6206.

I declare under penalty of perjury that the foregoing is true and correct.

Executed on December 9th, 2022

Sincerely,

Dianne Strand

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General Manager Regulatory Affairs Florida Power & Light Company

#### **Enclosures**

cc: NRC Project Manager - Point Beach

NRC Project Manager - St. Lucie

NRC Project Manager - Turkey Point

NRC Project Manager - Seabrook

Regional Administrator - NRC Region 1

Regional Administrator - NRC Region 2

Regional Administrator - NRC Region 3

NRC Resident Inspector - Point Beach

NRC Resident Inspector - St. Lucie

NRC Resident Inspector - Turkey Point

NRC Resident Inspector - Seabrook

Wisconsin Emergency Management

Chief, Bureau of Radiation Control, Florida Department of Health

Director Homeland Security and Emergency Management (New Hampshire)

#### **ENCLOSURE 1**

#### **Response to Supplemental Information Request**

#### The following information is requested:

The application should identify and include all the changes from the current emergency plans to the common plan and site-specific annexes.

The application should contain an analysis that can be used by the NRC staff to assess the impact of the proposed changes on the relief and support functions offered by the augmenting ERO staff to effectively implement the emergency plan.

This information should be sufficiently detailed and provides justification for extension of ERO response times and proposed changes to ERO on-shift and augmentation staffing.

#### Response

Enclosures 2 through 5 provide a comparison analysis that identifies the differences between the current site emergency plan (as of 01/12/22) and the proposed Common Emergency Plan and site specific Emergency Plan Annex, which were provided in Florida Power & Light Company letter L-2022-160, "License Amendment Request for Common Emergency Plan Consistent with NUREG-0654, Revision 2," dated October 4, 2022.

Enclosures 6 through 9 are technical basis documents for each site that contain information regarding the importance of each key function for effective emergency response; the basis for the positions and number of responders selected to fulfill those functions; and the basis for the augmentation times to relieve on-shift personnel of those functions.

#### **ENCLOSURE 2**

#### **Point Beach Nuclear Plant**

**Analysis Report #4** 

**Current to Proposed Emergency Plan Comparison Analysis** 

(136 pages follow)





# Point Beach Nuclear Plant (PBN)

# Analysis Report #4 Current to Proposed Emergency Plan Comparison Analysis

11/29/22

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#### 1. INTRODUCTION

This comparison analysis identifies the differences between the current emergency plan (as of 01/12/22) and the proposed Common Emergency Plan (CEP) and PBN Emergency Plan Site Annex.

Differences between the content of current emergency plan and the proposed emergency plan were evaluated to determine whether any potential reductions in effectiveness were introduced by changes made.

#### 2. REVIEW METHODOLOGY

The comparison between the current emergency plan and the proposed emergency plan was made as follows:

- 1. The first step compares the content of the current emergency plan to the proposed emergency plan to determine whether there was any change. Comparisons where the wording is the same are identified as '**No Change**'.
- 2. Where a difference does exist between the wording of the two documents, it is evaluated as Editorial, No Reduction in Effectiveness or a Potential Reduction in Effectiveness. The definitions for the differences are as follows:
  - **Editorial** Differences that include typographical, formatting, paragraph numbering, spelling, grammar, punctuation, or title; or wording changes that do not alter intent of the original content or level of commitment.
  - No Reduction in Effectiveness (Non-RIE) Differences in intent or methods of
    performing a function that sustain or improve the licensee's capability to perform
    an emergency planning function in the event of a radiological emergency.
  - Potential Reduction in Effectiveness (Potential RIE) Differences that may result in reducing the licensee's capability to perform an emergency planning function in the event of a radiological emergency.

Potential RIEs were then further evaluated to determine if an actual RIE exists. All Potential RIEs are dispositioned in Section 3, Summary.

#### 3. SUMMARY

This comparison analysis identifies the differences between the current emergency plan (as of 01/12/22) and the proposed NextEra Common Emergency Plan (CEP) and PBN Emergency Plan Site Annex.

Differences between the content of current emergency plan and the proposed emergency plan were evaluated to determine whether any potential reductions in effectiveness were introduced by changes made.

The results of the comparison between the current emergency plan and the proposed emergency plan revealed the following changes that could be considered reductions in effectiveness.

#### 3.1. **[Potential RIE 6-1]** Row 354 – Removed EP Initial Training of Non-ERO Personnel

Cı	ırrent	Emergency Plan	Common Emergency Plan & Site Annex
3.0	) (	ORGANIZATIONAL PREPAREDNESS	N/A
3.1	1 '	Training Corporate and Plant	
Pe	rsonn	el	
3.1	1.1	Personnel with unescorted access to	
Ne	extEra	Energy Point Beach:	
a.	Pers	onnel with unescorted access will be	
		ctrinated on the Emergency Plan and	
		rgency Plan Implementing Procedures	
		P) through the general access training	
		ram. This training program has	
	•	sions for immediate indoctrination of	
		employees. Thereafter, all personnel	
		unescorted access meet this	
		nitment during annual plant access	
	•	fication renewal.	
b.		onnel with unescorted access shall	
		ve, as a minimum, instructions in the	
		ving topics:	
	1.	Emergency alarms and their	
	_	meanings	
	2.	Emergency assembly areas	
	3.	Precautions and limitations during	
		emergencies	
	4.	Reasons for emergency plans	
5.		ker responsibilities during	
	eme	ergencies	

#### Disposition

R1 and R2 of NUREG-0654 do not contain criteria requiring a description of training for non-ERO/non-essential personnel within the emergency plan). No regulation, other guidance document or inspection procedure calls for a description of non-ERO general employee training to be contained in the emergency plan.

General industrial safety information, which includes awareness and expectations to normal, offnormal and emergency situations is provided to all personnel given unescorted access onto the site. General employee training for unescorted site access includes topics of safety conscious work environment (SCWE), stormwater pollution prevention (SWPP), spill prevention and control, hearing conservation, emergency plan, and fire extinguishers and is presented in the NANTel Generic Awareness and NextEra site specific site access training courses.

Site specific general awareness training scope (industrial and emergency condition related) is governed and controlled outside the emergency plan.

Emergency plan awareness content review in general employee training by personnel knowledgeable of the emergency plan is provided in document controls processes and procedures. These processes and procedures are also applicable to changes to made by other non-EP departments that could potentially impact the emergency plan.

## 3.2. **[Potential RIE 6-2]** Row 370 – Reduced Hospital and Ambulance Drill Participation and Periodicity

#### **Current Emergency Plan**

 Medical Emergency Drills
 A medical emergency drill involving a simulated contaminated individual and

simulated contaminated individual and containing provisions for participation by the Aurora Medical Center Manitowoc County is conducted every two years. The offsite portions of this drill may be performed as part of the annual exercise. Since the Kewaunee Power Station (KPS) will also be conducting drills with the hospital on a biennial basis, the hospital and a local ambulance service will participate in drills annually.

#### Common Emergency Plan & Site Annex

[CEP - N.4.a]

Each NextEra site will conduct an onsite simulated medical drill once per calendar year. The scope of the emergency medical drill will include a simulated on-site injured and contaminated individual and medical/ first aid treatment, including contamination control. Emergency Medical Drill offsite participation and periodicity for support Hospital and Ambulance services are performed in accordance with the 42 CFR 482.15 regulations and are not included in the scope of the station medical drills.

#### **Disposition**

The hospitals are accredited by The Joint Commission in compliance with 42 CFR 482.15, Condition of Participation: Emergency Preparedness. The regulations and accreditation require the hospitals to maintain an emergency plan and that the emergency preparedness program include, but not be limited to, the following elements (excerpts from the 42 CFR 482.15 regulation):

- (a) Emergency plan. The hospital must develop and maintain an emergency preparedness plan that must be reviewed, and updated at least every 2 years. The plan must do the following:
  - (1) Be based on and include a documented, facility-based and community-based risk assessment, utilizing an all-hazards approach.
  - (2) Include strategies for addressing emergency events identified by the risk assessment.
  - (4) Include a process for cooperation and collaboration with local, tribal, regional, State, and Federal emergency preparedness officials' efforts to maintain an integrated response during a disaster or emergency situation.

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#### **Disposition**

- (b) Policies and procedures. The hospital must develop and implement emergency preparedness policies and procedures, based on the emergency plan set forth in paragraph (a) of this section, risk assessment at paragraph (a)(1) of this section, and the communication plan at paragraph (c) of this section. The policies and procedures must be reviewed and updated at least every 2 years.
- (d) Training and testing. The hospital must develop and maintain an emergency preparedness training and testing program that is based on the emergency plan set forth in paragraph (a) of this section, risk assessment at paragraph (a)(1) of this section, policies and procedures at paragraph (b) of this section, and the communication plan at paragraph (c) of this section. The training and testing program must be reviewed and updated at least every 2 years.
  - (1) Training program. The hospital must do all of the following:
    - (i) Initial training in emergency preparedness policies and procedures to all new and existing staff, individuals providing services under arrangement, and volunteers, consistent with their expected role.
    - (ii) Provide emergency preparedness training at least every 2 years.
    - (iii) Maintain documentation of the training.
    - (iv) Demonstrate staff knowledge of emergency procedures.
    - (v) If the emergency preparedness policies and procedures are significantly updated, the hospital must conduct training on the updated policies and procedures.
  - (2) Testing. The hospital must conduct exercises to test the emergency plan at least twice per year. The hospital must do all of the following:
    - (i) Participate in an annual full-scale exercise that is community-based; or
      - (A) When a community-based exercise is not accessible, conduct an annual individual, facility-based functional exercise; or.
      - (B) If the hospital experiences an actual natural or man-made emergency that requires activation of the emergency plan, the hospital is exempt from engaging in its next required full-scale community-based exercise or individual, facility-based functional exercise following the onset of the emergency event.
    - (ii) Conduct an additional annual exercise that may include, but is not limited to the following:
      - (A) A second full-scale exercise that is community-based or an individual, facility-based functional exercise: or
      - (B) A mock disaster drill; or
      - (C) A tabletop exercise or workshop that is led by a facilitator and includes a group discussion, using a narrated, clinically-relevant emergency scenario and a set of problem statements, directed messages, or prepared questions designed to challenge an emergency plan.
    - (iii) Analyze the hospital's response to and maintain documentation of all drills, tabletop exercises, and emergency events, and revise the hospital's emergency plan, as needed.

Therefore, the hospitals use an all-hazards approach to determine the community-risk and priorities of its emergency response preparation (training, drills, etc.) on the risk / priority. Maintaining the Contaminated Medical Emergency Drill annual frequency, places a false priority /risk and circumvent the 42 CFR 482.15 community all-hazards regulations for the hospitals.

Ambulance services are under different regulations (primarily state regulations) but serves the same demographic and has similar community-risk and priority profile. Per the 42 CFR 482.15 regulation, the hospital's emergency plan includes cooperation and collaboration of local emergency preparedness officials and an annual full-scale community-based drill. CEP Section O.1.a, NextEra will continue to offer emergency response training annually to the ambulance service(s). Training includes basic radiation protection, the notification process for their organization, and their organization's expected role.

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#### **Disposition**

This change removes the requirement for hospital and ambulance participation in the annual emergency medical drill. The proposed CEP revision retains all other previous Offsite Response Organization (ORO) arrangements including offered annually training, offered participation in drills and pre-arrangements documented in Letters of Agreement (LOAs).

NextEra stations will continue to meet the requirements of 10 CFR 50.47(b)(14) and 10 CFR Part 50, Appendix E, Section IV.F.1. NextEra stations will continue to have arrangements with the OROs; annual training will be offered, and hospital participation in the emergency medical drill will be coordinated under 42 CFR 482.15 requirements. NextEra stations will participate in the hospital's community risk assessments to ensure the station's is properly risk evaluated and prioritized.

On-site emergency medical drill and training will be provided annually for the station's ERO. The training process/program will determine the need for additional on-site drills included in the training.

This drill participation arrangement was discussed with the OROs (hospitals and ambulance providers) and their concurrence is documented in Enclosure 10.

The 10 CFR Part 50 Appendix E and 10 CFR 50.47(b) regulations do not specify a frequency to perform the emergency medical drill. The annual frequency is specified in NUREG-0654 and provides the NRC approved guidance how to comply with the regulations. Licensees "may voluntarily use the guidance in the document to demonstrate compliance" with the NRC regulations or provide "methods or solutions that differ from those described." The alternate method of basing the drill frequency on the ORO community-risk assessment is appropriate and meets the intent of the planning standards.

The change to the emergency medical drill scope retains the annual requirement for the station while allowing the hospital and ambulance service the ability to participate under and within their regulatory requirements. This should provide a commitment which the NRC can evaluate as an acceptable alternate method to comply with 10 CFR Part 50 Appendix E and 10 CFR 50.47(b) regulations.

## 3.3. [Potential RIE 6-3] Row 374 – Eliminated Annual Site Assembly, Accountability, and Evacuation Drills

# Current Emergency Plan Common Emergency Plan & Site Annex Site Assembly Assembly Assembly and Augustability and August

g. Site Assembly, Accountability, and	N/A
Evacuation Drills	
A site assembly drill is conducted annually to	
assure that all personnel are aware of	
assembly areas. Accountability is implemented	
to ensure all personnel have been accounted	
for onsite. A release or evacuation of non ERO	
personnel may also be conducted as a part of	
the drill.	

#### Disposition

NextEra proposes to remove the requirement for an annual Site Assembly, Accountability, and Evacuation Drills at PBN, to align the fleet with NUREG 0654 R2 guidance.

PBN installed an annual assembly drill in 2003 via 50.54(q) process in response to questions from the NRC regarding the knowledge of the ERO and Non-ERO personnel on assembly locations. This was not a formal commitment to the NRC to maintain this activity.

Through the following years, the annual assembly drill has been completed without incident. The drills have not had any issues of personnel not knowing expected actions and where to assemble.

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#### **Disposition**

Initial training and continuing training for site access will retain information on locations of assembly locations and expected personnel response. As part of the overall drill and exercise program the ERO is drilled to validate the site protective action processes, with limited participation of Non-ERO personnel.

#### 3.4. [Potential RIE 6-4] Row 376 – Changed Frequency of Augmentation Drill from Annually to Once per Eight-Year Cycle

#### **Current Emergency Plan Common Emergency Plan & Site Annex** Shift Augmentation Drills ICEP - N.4.h1 Each NextEra site will conduct an off-hours Shift augmentation drills will be conducted unannounced ERO report-in drill at least once annually. within an eight-year cycle. The scope of the off-hours unannounced ERO report-in drill will require actual response to the assigned facility. The Off-Hours Report-In Drill requirement may be satisfied by an actual event provided objectives are evaluated and documented in a critique report. [CEP - N.4.i] The NextEra ERO notification is an all-call process. Each NextEra site will conduct an offhours unannounced ERO call-in drill biennially to verify each minimum staffing ERO position meets the required Table B-1 response time. The scope of the off-hours unannounced ERO call-in drill will require collection of the ERO notification system report which documents response within the required time. Completion of an Element N.4.h off-hours unannounced ERO report-in drill satisfies the requirements of the off-hours unannounced ERO call-in drill in this element. The Off-Hours Call-In Drill requirement may be

#### **Disposition**

The current plan requirement for an annual augmentation drill for the ERO duty team has been changed to once per eight year cycle.

critique report.

satisfied by an actual event provided the objectives are evaluated and documented in a

NUREG-0654. Revision 2, Element N.4.h requires that off-hours report-in drills be unannounced and conducted biennially. The proposed NextEra Common Emergency Plan specifies that an unannounced off-hours report-in drill be performed once per 8-year cycle.

Establishing the period for the off-hours report-in drill as once per 8-year cycle is based on the NUREG-0654, Revision 2, Element N.1.c requirement for a 6:00 p.m. and 4:00 a.m. drill or exercise to be performed once per cycle (which is off-hours).

In addition to the requirement of Element N.1.c, every biennial exercise requires demonstration of ERO response and ERF activation following declared emergencies. Requiring additional biennial off-hours report-in drills is a burden to the organization without a commensurate level of benefit to the emergency preparedness program.

#### **Disposition**

Performance of the Element N.4.h call-in drill biennially provides sufficient demonstration of offhours augmentation capability without significant impact on employees during late non-working hours.

The NextEra ERO notification is an all-call process, which for call-in drills will collect response time estimates from the entire ERO. This process validates all ERO members' response time each time it is used. The CEP drill criteria requires that the biennial ERO call in drill to be unannounced. This change aligns the CEP drill requirement with the intent of NUREG-0654 R2 criteria and provides a shorter periodicity for the testing of the full ERO notification process (annual team testing results in full testing every four years vs. every two years under the new criteria).

The proposed frequency for ERO call-in and report in drills will not impact the ability of the ERO to perform the augmentation function.

## 3.5. **[Potential RIE 6-5]** Row 381 – Reduced ERO Roster Review Periodicity from Quarterly to Semiannually

#### **Current Emergency Plan**

# 4.0 REVIEW AND UPDATING OF THE PLAN, PROCEDURES AND LETTERS OF AGREEMENT

The Emergency Plan and EPIPs will be reviewed on an annual basis and updated as necessary. Updates will take into account needed changes identified by drills and exercises. Management controls will be implemented for evaluation and correction of review findings. The Site Director is responsible for coordinating these efforts. The Site Director is also responsible for coordinating the review and updating of the EPMPs. This includes a quarterly review of emergency telephone lists.

The Manager Nuclear Assurance & Assessment is responsible with the Manager Emergency Preparedness for arranging with the Nuclear Assurance Section for an annual review of the Emergency Preparedness Program.

Letters of agreement between NextEra Energy Point Beach and outside organizations and agencies will be reviewed annually and renewed if required.

#### **Common Emergency Plan & Site Annex**

See row 381 for additional Common Plan wording for other items in current plant section. [CEP – P.10]

The NextEra emergency communications directory contains select contact numbers for ORO and support organizations identified in the emergency plan and implementing procedures. The ERO call-out system contains comprehensive ERO contact information. NextEra ERO contact information is verified semi-annually and updated as needed. Facility and support contact information in the

emergency communications directory is verified annually and updated as needed.

#### **Disposition**

Due to the local relationships and the advancement of technology, the quarterly emergency telephone directory review is being changed to a semi-annual review. Historically, little change between quarters has occurred such that changing to a semi-annually review would have little impact on accuracy.

With cellular phones being the primary notification tool for ERO personnel, there is not nearly as many changes of phone numbers. In the past, if an individual moved their residence, their phone number likely did not travel with them as the numbers were tied to geographical regions within the city or town they were moving (land lines). With cell phones and changes to long distance billing, many people keep their same cell phone number as they move, whether across town or across country.

#### Disposition

Most businesses or other support contacts that are listed in emergency telephone directory are established entities that do not change their business lines often enough to warrant a check every quarter. In addition, the internet is now the primary location to obtain business numbers, with these numbers readily available fewer numbers are required to be maintained in EP phone lists

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Note: Tables and figures contained in the current emergency plan and the CEP/site annex are not included in the following comparison table. All tables and figures were reviewed for possible commitments and key items were included at the end of the comparison table.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
1.	4. EP 1.0, Introduction, R33  1.0 PURPOSE The purpose of the Emergency Plan is to describe an organization for managing emergency situations, to classify emergencies according to severity, to define and assign responsibilities and authorities, to clearly outline an effective course of action and protective measures required to mitigate the consequences of an accident, and to safeguard the public and plant personnel in the event of an accident at NextEra Energy Point Beach, LLC (NextEra Energy Point Beach).	[CEP – Introduction] The NextEra Common Emergency Plan provides the means to protect the health and safety of the general public, persons temporarily visiting or assigned to nuclear power plants operated by NextEra, and plant employees. NextEra operates the Point Beach, Seabrook Station, Saint Lucie, and Turkey Point nuclear plants.  [PBN Annex - Introduction] This Point Beach Nuclear (PBN) Emergency Plan Annex supplements the NextEra Common Emergency Plan by providing site specific information unique to the station. It is subject to the same change and audit requirements as the NextEra Common Emergency Plan.  The PBN is a two unit pressurized water nuclear power plant located on a 1,260 acre site in the town of Two Creeks, Wisconsin. The plant is owned and operated by NextEra Energy Point Beach, LLC, an	Editorial Revised introductory wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format. No added, removed or altered commitments or change of intent.
2.	Detailed Emergency Plan Implementing Procedures (EPIPs) required to implement the Emergency Plan have been developed and are available for use at the plant site. These procedures take into account such items as radiation hazards, weather conditions, availability of technical and operating personnel, communications links, and support agencies. Generic guidance related to individual positions in the Emergency Response Organization (ERO) are	indirect, wholly owned subsidiary of NextEra Energy, Inc.  This document matches the structure of the NextEra Common Emergency Plan in following the format of NUREG-0654. It only contains the guidance elements that have site specific information therefore the numbering may not always be sequential.  [CEP - P.7]  Table P.7-1 provides a listing, by title, of the common response and maintenance procedures required to implement the emergency plan, and the section(s) of the emergency plan to be implemented by each procedure.  A listing, by title, of the site-specific response and maintenance procedures required to implement the emergency plan is provided in the site annexes.	Editorial  No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	provided in the Position Instruction Manual (PIM)		
	response checklists.		
3.	2.0 SCOPE AND APPLICABILITY	[CEP – Introduction]	Editorial
	This Emergency Plan is applicable to NextEra Energy Point Beach. The plant is an indirect, wholly owned subsidiary of FPL Energy, LLC (FPLE), 700 Universe Boulevard, Juno Beach, FL 33408, and is located at 6610 Nuclear Road, Two Rivers, WI 54241. The Emergency Plan describes advance planning elements and the provisions and implementing procedures developed for emergency situations. The EPIPs for this Plan consist of the procedures used by responding personnel in emergency situations. Other plant procedures that play a role in emergency situations include plant operating, emergency operating, radiological control, security, and administrative procedures. These procedures are compatible with the Plan and will be used to mitigate the consequences of any emergency.	The NextEra Common Emergency Plan provides the means to protect the health and safety of the general public, persons temporarily visiting or assigned to nuclear power plants operated by NextEra, and plant employees. NextEra operates the Point Beach, Seabrook Station, Saint Lucie, and Turkey Point nuclear plants.  [PBN Annex - Introduction]  This Point Beach Nuclear (PBN) Emergency Plan Annex supplements the NextEra Common Emergency Plan by providing site specific information unique to the station. It is subject to the same change and audit requirements as the NextEra Common Emergency Plan.  The PBN is a two unit pressurized water nuclear power plant located on a 1,260 acre site in the town of Two Creeks, Wisconsin. The plant is owned and operated by NextEra Energy Point Beach, LLC, an indirect, wholly owned subsidiary of NextEra Energy, Inc.  This document matches the structure of the NextEra	Revised introductory wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format.
		Common Emergency Plan in following the format of NUREG-0654. It only contains the guidance elements that have site specific information therefore the numbering may not always be sequential.	
4.	The interrelationships among the various elements of onsite emergency response and the elements of offsite emergency response are described in this Emergency Plan along with the appropriate federal, state, and local agencies participating in radiological emergencies.	[CEP – A.1] Element A.1.a.1 below provides a summary of NextEra response organization responsibilities as they relate to the overall concept of operations for event response. A detailed description of the NextEra Emergency Response Organization (ERO) is contained in Section B.  The elements below identify the federal, Offsite Response Organizations (OROs), and other organizations that encompass the overall response organization for an event at a NextEra site.	Editorial Interrelationships described in section A of CEP. No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
5.	3.0 GENERAL The Emergency Plan is the guiding document to	[CEP – Introduction]	Editorial  No added, removed or altered
	which the procedures are written. The Plan describes the organization, emergency measures, facilities, training, etc., of the NextEra Energy Point Beach Emergency Preparedness Program. The implementing procedures more accurately reflect how a particular situation will be addressed, how personnel will be assigned, how equipment will be placed, etc.	The NextEra Common Emergency Plan provides the means to protect the health and safety of the general public, persons temporarily visiting or assigned to nuclear power plants operated by NextEra, and plant employees. NextEra operates the Point Beach, Seabrook Station, Saint Lucie, and Turkey Point nuclear plants.	commitments or change of intent.
	5. Section EP 2.0, Acronyms & Definitions, R60	CEP – Appendix 2 - Abbreviations and Acronyms	
6.	1.0 Key Abbreviations		Editorial Appendix 2 of the Common Emergency plan contains list of Abbreviations and Acronyms used in the plan and station annex. No added, removed or altered commitments or change of intent was made in removal or addition of any Abbreviations and Acronyms.
		CEP – Appendix 1 - Definitions	Ţ
7.	<ul> <li>2.0 Definitions</li> <li>This section provides definitions of terms applicable to the NextEra Energy Point Beach Emergency Plan.</li> <li>2.1 Accident</li> <li>An unforeseen and/or unintentional event and its consequences that may result in an emergency.</li> </ul>	Accident: any unforeseen, or unintentional occurrence or mishap resulting in, or potentially resulting in, physical injury or injury due to radiation exposure or excessive exposure to radioactive materials.	Editorial Revised definition to align fleet terms. No added, removed or altered commitments or change of intent.
8.	2.2 Accountability	[CEP – J.4]	Editorial
	Accountability is the gathering of names of personnel within the protected area and maintaining control of their movement.	Typically, accountability of personnel inside the Protected Area is completed within 30 minutes of event declaration. Following a hostile action event, the personnel accountability process is initiated following containment or cessation of the threat. Missing individual(s) will be identified by Security. Appropriate actions will be taken to locate missing individual(s). When necessary, search and rescue team(s) will be dispatched to locate and, if necessary, rescue missing individual(s).	Revised definition to align fleet terms.  Definition moved to section J.4
9.	2.3 Activated	Activated: an emergency response facility is	Editorial
	An ERF is considered activated when it has filled the	declared activated when minimum staffing	

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	designated minimum staff positions (See EP 5.0). Upon activation, it is intended that facilities assume all of the applicable responsibilities from the Control Room.	requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions.	Revised definition to align fleet terms.  No added, removed or altered commitments or change of intent.
10.	2.4 Actuate To put into operation; to move to action; commonly used to refer to automated, multi faceted operations. "Actuate ECCS"		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
11.	2.5 Admin Building This three story building houses the TSC proper, the OSC, additional reference documents in the TSC Library, and offices areas. The 8' level is within the TSC post accident ventilation system envelope.		Non-RIE Removed - Definition of site buildings are contained in FSAR. No added, removed or altered commitments or change of intent.
12.		Annual: For drills and exercise periodicity, annual is once per calendar year. For training and qualification periodicity and work products, annual is every 12 months not to exceed 15 months.	Non-RIE Definition added to align fleet terms.
13.	2.6 Alternative Facility A location that may be used as a staging area for TSC and OSC in the event that the site is under threat of or experiencing a HOSTILE ACTION. (B 1) (B 2)	[CEP – H.4] An alternative facility provides a location for the staging of ERO personnel in the event of a Security or Hostile Action threat for each NextEra site. The alternative facility may also serve as an evacuation location for TSC and OSC personnel should those facilities become uninhabitable.  [PBN Annex – H.4] The Two Rivers Fire Department (TRFD) is designated as an Alternative Facility which is to be used as a staging area. The TRFD is located at 2122 Monroe Street, Two Rivers, WI.	Editorial Definition revised to align fleet terms. No added, removed or altered commitments or change of intent.
14.	2.7 Assembly Assembly is an orderly gathering of personnel into designated areas to facilitate accountability and/or evacuation of non essential personnel in those circumstances where additional controls need to be placed on the egress of personnel.	[CEP – J.1.a] When a site evacuation occurs, ERO and other essential personnel respond to their designated response facilities/areas. Non-essential personnel inside the Protected Area typically exit to the OCA by following normal RP and Security processes and proceed to a designated assembly area. Further evacuation of non-essential personnel inside the OCA occurs as warranted for the particular site.	Editorial Discussion of assembly moved to section J.1.a of CEP. No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
15.	2.8 Assessment Actions Those actions taken during or after an accident to obtain and process information necessary to make decisions to implement specific emergency measures.		Non-RIE  Definition removed. Term is not applicable to formal definition and applies before, during and post event.
16.	2.9 Adversary One or more individuals who are engaged in a determined assault, overtly or by stealth and deception, equipped with suitable weapons capable of killing, maiming, or causing destruction.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
17.	2.10 Affecting Safe Shutdown Event in progress has adversely affected functions that are necessary to bring the plant to and maintain it in the applicable HOT or COLD SHUTDOWN condition. Plant condition applicability is determined by Technical Specification LCOs in effect		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
18.	2.11 Alert Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.	[CEP – D.1] Alert Events are in progress, or have occurred, which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life-threatening risk to site personnel or damage to site equipment because of hostile action. Any releases are expected to be small fractions of the EPA Protective Action Guideline exposure levels.	No Change Definition moved to section D of CEP
19.	2.12 Available  The state or condition of being ready and able to be used (placed into operation) to accomplish the stated (or implied) action or function. As applied to a system, this requires the operability of necessary support systems (electrical power supplies, cooling water, lubrication, etc.).		Non-RIE  Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
20.	2.13 Background Radiation The radioactivity that occurs naturally in our environment.		Non-RIE Definition removed. Radiation descriptions governed by RP procedures.
21.	2.14 Bomb Refers to an explosive device suspected of having		Non-RIE Definitions specific to Emergency

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	sufficient force to damage plant systems or structures.		Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
22.	2.15 Civil Disturbance Is a group of two or more persons violently protesting station operations or activities at the site.		Non-RIE  Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
23.	2.16 Clean Area That area within the protected area excluding the radiologically controlled area(s).		Non-RIE  Definition removed. Radiation Area descriptions governed by RP procedures.
24.	2.17 Close To position a valve or damper so as to prevent flow of the process fluid. To make an electrical connection to supply power.		Non-RIE  Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
25.	2.18 Confinement Boundary The barrier(s) between areas containing radioactive substances and the environment.		Non-RIE  Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
26.	2.19 Confirm/Confirmation To validate, through visual observation or physical inspection, that an assumed condition is as expected or required, without taking action to alter the "As found" configuration.		Non-RIE  Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
27.	2.20 Containment Building Houses the reactor, pressurizer, reactor coolant pumps, steam generator, and other equipment or piping containing reactor coolant. The containment building is an airtight structure which is made of steel reinforced concrete with an inside steel liner.		Non-RIE  Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
28.	2.21 Containment Closure The action taken to secure containment and its assorted structures, systems and components as a functional barrier to fission product release under existing plant conditions. Containment closure is initiated per the Shutdown Emergency Procedures		Non-RIE  Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	(SEPs) or Shift Manager direction if plant conditions change that could raise the risk of a fission product release as a result of a loss of decay heat removal. Containment closure requires that, upon a loss of decay heat removal, any open penetration which is listed on CL 1E, Containment Closure Checklist, must be closed or capable of being closed prior to RCS bulk boiling. This checklist is maintained any time that the RCS is <200 □ F and containment operability is not maintained.		
29.	2.22 Contiguous Being in actual contact; touching along a boundary or at a point.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
30.	2.23 Control Take action, as necessary, to maintain the value of a specified parameter within applicable limits; to fix or adjust the time, amount, or rate of; to regulate or restrict.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
31.		Concept of Operations: delineation of an organization's roles and responsibilities and how the organization will function to accomplish those responsibilities.	Non-RIE Definition added to align fleet terms.
32.	2.24 Control Room (CR) The Control Room is operated under the direction of the Shift Manager. It is the primary place where conditions are monitored and corrective actions for both units are taken to mitigate any abnormal occurrence. It is the location where primary assessment and classification of an accident begins. It's purpose is to monitor the conditions of both units and provide the main communications link between the plant and the TSC concerning analysis of reactor system problems, as well as long and short term guidance on corrective actions.		Non-RIE Definition removed. Control Room is defined in the FSAR
33.	2.25 Corporate Office Corporate offices refer to NextEra Energy corporate headquarters located in Juno Beach, FL. Examples of support provided are risk management, legal,		Non-RIE Definition removed. No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	insurance, finance, communications, and governmental liaison support.		
34.	2.26 Corrective Actions Those emergency measures taken to improve or terminate an emergency situation at or near the source of the problem, to prevent or mitigate any release of radioactive material, or to reduce the magnitude of the emergency situation, (e.g., shutting down equipment, fire fighting, repair, and damage control).		Non-RIE Definition removed. Term is not applicable to formal definition and applies before, during and post event.
35.	2.27 Discharge Removal of a fluid/gas from a volume or system.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
36.		<b>Dosimeter</b> : an instrument used to measure and record radiation doses or dose rates.	Non-RIE  Definition added to align fleet terms.  No added, removed or altered commitments or change of intent.
37.	2.28 Emergency The situation or condition which may result in damage to property or risk to the health and safety of the general public or plant personnel.	[CEP – D.1]  NextEra has established and maintains a standard emergency classification and emergency action level scheme.	Non-RIE  Definition removed. "Emergency" as applicable to the Emergency Plan are determined by The EALs
38.	2.29 Emergency Actions Those steps taken, as a result of exceeding an emergency action level in a plant emergency operating procedure or in this Emergency Plan, to assess the situation and ensure that the proper corrective and/or protective actions are taken.	[CEP – D.3]  NextEra maintains procedures that include immediate actions to be taken that are consistent with any declared ECL.  Emergency Operating Procedures provide instructions to Control Room personnel to assist in mitigating the consequences of a broad range of accidents and multiple equipment failures. These procedures are based on guidelines developed by the owners' groups.  Emergency plan implementing procedures provide instructions to ERO personnel for response activities primarily associated with assessment, classification, notification and protective actions. Other functions such as communications, termination and recovery are also addressed.	Non-RIE Definition removed. Section D of the CEP provide a summary of response actions when emergencies are declared.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
39.	2.30 Emergency Action Level (EAL) A predetermined set of initiating conditions which places the plant in a given emergency class. An EAL can be an instrument reading, equipment status, measurable parameter either on or offsite, an observable event or other phenomenon which, if it occurs, indicates entry into a particular emergency class.	[CEP – D.1.a] Emergency Action Levels (EALs) at NextEra sites have been developed in accordance with NRC endorsed guidance. This guidance and the NextEra site EAL schemes have been approved by the NRC.	Non-RIE  Definition removed. EAL are described in Section D of CEP and the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
40.	2.31 Emergency Alert System A set of pre-determined local radio stations which will broadcast emergency messages advising area residents of Protective Actions to be taken.	[CEP – E.2] Detailed ANS information is maintained in the ANS design report for each site as listed in the site annexes. [PBN Annex – E.2] Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-PBN-115, PBN Alert and Notification System Design Report.	Non-RIE  Details on the Alert and Notification System located in the FEMA approved Design Report
41.	2.32 Emergency Classification System A classification system that arranges accidents according to their severity. Four emergency classifications are defined under this system. They are, in order of increasing severity: Unusual Event Alert Site Area Emergency General Emergency	[CEP – D.1]  NextEra has established and maintains a standard emergency classification and emergency action level scheme. The EAL technical basis manual is referenced in the site annexes. The spectrum of postulated emergency events is categorized into the following four (4) emergency classification levels (ECLs):  Unusual Event  Alert  Site Area Emergency  General Emergency	Editorial Definition moved to section D.1 of CEP No added, removed or altered commitments or change of intent.
42.	2.33 Emergency Coordinator A designated person responsible for the overall onsite management of the emergency response.	[CEP – B.2] The Emergency Director ERO position has overall command and control of a declared emergency at a NextEra site. The Shift Manager is the individual who is on-shift at all times and assumes the role of Emergency Director upon emergency declaration. As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency	Editorial Definition moved to section B.2 of CEP No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures,	
43.	2.34 Emergency Director A designated person responsible for the overall management of the Emergency Operations Facility and overall management and responsibility for the emergency response and recovery operations for NextEra Energy Point Beach.	[CEP – B.2.a] The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level.	Editorial Definition moved to section B.2.a of CEP No added, removed or altered commitments or change of intent.
44.	2.35 Emergency Operations Center (EOC) The headquarters for emergency response by the county and state governments. The state and each county has its own EOC, located at the state capitol or county seat.	<b>Emergency Operations Center (EOC):</b> a facility that is the primary base of emergency operations for an ORO in a radiological incident.	Revised definition to align fleet terms.  No added, removed or altered commitments or change of intent.
45.	2.36 Emergency Operations Facility (EOF) Following its activation, this facility is located in Green Bay, approximately 24 miles northwest of the plant. This facility is operated by the Emergency Director for evaluating and controlling emergency situations that may affect the public. For example, radiological dose projections and verifications will be performed at the EOF and results will be provided to local, state, and federal agencies as required for implementation of offsite emergency plans. The EOF serves as the command center for direction of recovery operations.	[CEP – H.3] The Emergency Operations Facility (EOF) provides a dedicated location for support of the site event response activities. The EOF is sized to accommodate ERO responders and NRC, FEMA, and state representatives.  [PBN Annex – H.3] The Emergency Operations Facility (EOF) is located at 3060 Voyager Drive, Green Bay, WI., approximately 24 miles northwest of the plant. The EOF provides working areas for Federal, State and local response personnel. Including conference areas with white boards, separate briefing/debriefing areas, telephones, ERO position telephone numbers, access to the internet, necessary office supplies and photocopier access, and access to plant radiological information.	Revised definition to align fleet terms. Moved to section H.3 No added, removed or altered commitments or change of intent.
46.	2.37 Emergency Plan Implementing Procedures (EPIPs) Specific procedures providing actions to implement this Emergency Plan in order to mitigate or terminate an emergency situation.		Non-RIE Definition removed. Current EPIP description documented in Section P (see also Table P.7-1).
47.	2.38 Emergency Plan Maintenance Procedure (EPMPs) Specific procedures providing information and actions		Non-RIE Definition removed. Current EPIPs description documented in Section

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	designed to maintain equipment and facilities prepared to respond to an emergency situation.		P (see also Table P.7-1).  NOTE: Maintenance procedures considered part of emergency plan implementing procedures.
48.	2.39 Emergency Planning Zone (EPZ) Offsite area surrounding NextEra Energy Point Beach for which planning is conducted to ensure that prompt and effective actions can be taken to protect the public in the event of an accident. For the plume exposure pathway, the EPZ has a radius of approximately 10 miles; and for the ingestion exposure pathway, the EPZ has a radius of approximately 50 miles (see Appendix C and Appendix J).	Emergency Planning Zone (EPZ): a geographic area surrounding a commercial NPP for which emergency planning is needed to ensure that prompt and effective actions can be taken by OROs to protect public health and safety in the event of a radiological incident. The plume exposure pathway EPZ is approximately 10 miles in radius, while the ingestion exposure pathway EPZ has a radius of approximately 50 miles.	Editorial  No added, removed or altered commitments or change of intent.
49.		Emergency Response Data System (ERDS): a direct near real-time electronic data link between the licensee's onsite computer system and the NRC Operations Center that provides for the automated transmission of a limited data set of selected plant parameters.	Non-RIE Definition added to align fleet terms. No added, removed or altered commitments or change of intent.
50.	2.40 Emergency Response Organization (ERO) Specific personnel who are trained in various positions to respond to the emergency.	Emergency Response Organization (ERO): the personnel assigned to perform tasks and activities associated with implementation of a licensee's emergency plan for coping with radiological incidents.	Editorial  No added, removed or altered commitments or change of intent.
51.	2.41 Enter To go into.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
52.	2.42 Establish To perform actions necessary to meet a stated condition. "Establish communication with the Control Room."		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
53.	2.43 Evacuation The process implemented where non essential personnel are removed from site due to emergency conditions.	[CEP—J.1.a] When a site evacuation occurs, ERO and other essential personnel respond to their designated response facilities/areas. Non-essential personnel inside the Protected Area typically exit to the OCA by	Editorial Definition removed. Term defined in Section J of CEP.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		following normal RP and Security processes and proceed to a designated assembly area. Further evacuation of non-essential personnel inside the OCA occurs as warranted for the particular site.	
54.		<b>Evacuation Time Estimate (ETE):</b> a calculation of the time it would take to evacuate the public within the plume exposure pathway EPZ under emergency conditions.	Non-RIE Definition added to align fleet terms.
55.		<b>Evaluation</b> : the process of observing drill or exercise performance to identify strengths and opportunities for improvement in an entity's emergency preparedness and response capabilities.	Non-RIE Definition added to align fleet terms.
56.	2.44 Exceeds To go or be beyond a stated or implied limit, measure, or degree.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
57.	2.45 Exclusion Area The area within the site boundary surrounding NextEra Energy Point Beach in which the plant personnel have the authority to determine all activities including exclusion or removal of personnel and property from the area. At NextEra Energy Point Beach, the outer boundary of the exclusion area is coincident with the site boundary (see Appendix C).		Non-RIE  Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
58.	2.46 Exist To have being with respect to understood limitations or conditions.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
59.	2.47 Explosion Is a rapid, violent, unconfined combustion, or catastrophic failure of pressurized equipment that imparts energy of sufficient force to potentially damage permanent structures, systems, or components.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
60.	2.48 Extortion An attempt to cause an action at the station by threat of force.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
			Emergency Action Level (EAL) Technical Basis Document (TBD)
61.	2.49 Failure A state of inability to perform a normal function.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
62.	2.50 Faulted In a steam generator, the existence of secondary side leakage that results in an uncontrolled decrease in steam generator pressure or the steam generator being completely depressurized.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
63.	2.51 Federal Emergency Management Agency (FEMA) The lead federal agency with responsibility for off site federal response to a nuclear power plant incident.		Non-RIE  Definition removed. FEMA definition and responsibilities defined by governmental agencies.  No added, removed or altered commitments or change of intent.
64.	2.52 Federal Response Center (FRC) The central location to be used as the command center for all federal agencies.		Non-RIE  Definition removed. FRC definition and responsibilities defined by governmental agencies.  No added, removed or altered commitments or change of intent.
65.	2.53 Federal Radiological Monitoring and Assessment Center (FRMAC) Where the Department of Energy will establish a center to coordinate radiological analysis of the event.		Non-RIE Definition removed. FRMAC definition and responsibilities defined by governmental agencies. No added, removed or altered commitments or change of intent.
66.	2.54 Field Monitoring Teams (FMT) Field Monitoring Teams are dispatched from the Operations Support Center under the direction of the Site Radiation Protection Coordinator (SRPC) or the EOF RP Manager. FMT primary function is to monitor radiological conditions around NextEra Energy Point Beach and within the 10 mile EPZ.	Field Monitoring Team (FMT): a group used to detect and monitor radiation in the environment.	Editorial Revised definition to align fleet terms. No added, removed or altered commitments or change of intent.
67.	2.55 Fire Combustion characterized by heat and light. Sources		Non-RIE Definitions specific to Emergency

**Current Emergency Plan Common Emergency Plan and Site Annex** Change Type of smoke such as slipping drive belts or overheated Action Levels are defined in the Site electrical equipment do not constitute FIREs. Emergency Action Level (EAL) Observation of flame is preferred but is NOT required Technical Basis Document (TBD) if large quantities of smoke and heat are observed. Fission Product Barriers (FPB) 68. Non-RIE Multiple physical barriers any of which, if maintained Definitions specific to Emergency intact, precludes the release of significant amounts of Action Levels are defined in the Site radioactive fission products to the environment. The Emergency Action Level (EAL) FPBs are the Reactor Fuel Cladding (FC), Reactor Technical Basis Document (TBD) Coolant System (RCS) and Containment (PC). 2.57 Gatehouse **Non-RIE** 69. A building at the perimeter of the protected area Definitions specific to Emergency staffed by security force personnel and used for Action Levels are defined in the Site normal access to and egress from the protected area. Emergency Action Level (EAL) The gatehouse on the south side of the plant is the Technical Basis Document (TBD) primary access and egress point to the plant. In an emergency situation where the south gatehouse would be unavailable, Security could activate the vehicle gate on the north side of the plant for emergency access or egress to the plant. General Emergency 2.58 [CEP - D.1] No Change 70. Events are in process or have occurred which involve 4. General Emergency (GE) Definition moved to Section D of actual or imminent substantial core degradation or Events are in progress or have occurred which CEP melting with potential for loss of containment integrity involve actual or imminent substantial core or HOSTILE ACTION that results in an actual loss of degradation or melting with potential for loss of physical control of the facility. Releases can be containment integrity or hostile actions that result in reasonably expected to exceed EPA Protective an actual loss of physical control of the facility. Action Guideline exposure levels offsite for more than Releases can be reasonably expected to exceed EPA the immediate site area. PAG exposure levels offsite for more than the immediate site area. 2.59 Hostage Non-RIE 71. A person(s) held as leverage against the station to Definitions specific to Emergency ensure that demands will be met by the station. Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD) 2.60 Hostile Action 72. Non-RIE An act toward a nuclear power plant or its personnel Definitions specific to Emergency that includes the use of violent force to destroy Action Levels are defined in the Site equipment, take hostages, and/or intimidate the Emergency Action Level (EAL) licensee to achieve an end. This includes attack by Technical Basis Document (TBD)

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. HOSTILE ACTION should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the nuclear power plant. Non terrorism based EALs should be used to address such activities, (e.g., violent acts between individuals in the owner controlled area).		
73.	2.61 Hostile Force One or more individuals who are engaged in a determined assault, overtly or by stealth and deception, equipped with suitable weapons capable of killing, maiming, or causing destruction.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
74.	2.62 Immediately Dangerous to Life and Health (IDLH) A condition that either poses an immediate threat to life and health or an immediate threat of severe exposure to contaminants which are likely to have adverse delayed effects on health.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
75.	2.63 Incident This term is often used interchangeably with the term "accident" and, therefore, shall be considered to have the same definition.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
76.	2.64 Indicate  To point out or point to; to display the value of a process variable; to be a sign or symbol.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
77.	2.65 Ingestion Exposure Pathway The principal exposure from this pathway would be from ingestion of contaminated water or foods such as milk, livestock feed, or vegetables. Depending on the magnitude and nature of the radiological emergency, the time of potential exposure may range in duration from hours to months.	Ingestion Exposure Pathway: the principal exposure from this pathway would be from ingestion of contaminated water or foods, such as milk or fresh vegetables.	Editorial Revised definition to align fleet terms. No added, removed or altered commitments or change of intent.
78.		Ingestion Exposure Pathway Emergency Planning Zone: a geographic area, approximately 50 miles in	Non-RIE Definition added to align fleet terms.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		radius surrounding a commercial NPP.	No added, removed or altered
			commitments or change of intent.
79.	2.66 Initiate		Non-RIE
	The act of placing equipment or a system into		Definitions specific to Emergency
	service, either manually or automatically. Activation of		Action Levels are defined in the Site
	a function or protective feature (i.e. initiate a manual		Emergency Action Level (EAL)
	trip).		Technical Basis Document (TBD)
80.	2.67 Injection		Non-RIE
	The act of forcing a fluid into a volume or vessel.		Definitions specific to Emergency
			Action Levels are defined in the Site
			Emergency Action Level (EAL)
			Technical Basis Document (TBD)
81.	2.68 Inoperable		Non-RIE
	Not able to perform its intended function.		Definitions specific to Emergency
			Action Levels are defined in the Site
			Emergency Action Level (EAL) Technical Basis Document (TBD)
	2.00 Interreted Dublic Alart and Marries Customs	10ED E 01	` '
82.	2.69 Integrated Public Alert and Warning System (IPAWS)	[CEP – E.2]	Non-RIE
	IPAWS is a warning system installed to warn persons	Detailed ANS information is maintained in the ANS design report for each site as listed in the site	Details on the Alert and Notification System located in the FEMA
	within a 10-mile radius around NextEra Energy Point	annexes.	approved Design Report
	Beach. IPAWS uses a variety of notification vehicles	[PBN Annex – E.2]	approved Design Report
	for distributing emergency messages, including, but	Detailed information on the FEMA approved system	
	not limited to analog, digital and satellite radio and	used to alert and notify the general public is	
	television via the Emergency Alert System (EAS); cell	maintained in EP-PBN-115, PBN Alert and	
	phones and mobile devices via Wireless Emergency	Notification System Design Report.	
	Alerts (WEA); National Oceanic and Atmospheric	Treamedian System Boolgh Hopera	
	Administration (NOAA) all hazards national weather		
	radio via the IPAWS-NOAA gateway; internet		
	applications and websites.		
83.	2.70 Intrusion / Intruder		Non-RIE
	A person(s) present in a specified area without		Definitions specific to Emergency
	authorization. Discovery of a BOMB in a specified		Action Levels are defined in the Site
	area is indication of INTRUSION into that area by an ADVERSARY.		Emergency Action Level (EAL)
<u> </u>		1050 1151	Technical Basis Document (TBD)
84.	2.71 Joint Information Center (JIC)	[CEP – H.5]	Non-RIE
	This facility is under the direction of the JIC Manager	When activated the JIC functions as a physical	Definitions moved to section H.5
	and functions as a coordinating point and common working area for local, county, state and federal	location for interacting with the media and for	Direction of JIC described in section
	working area for local, country, state and lederal	coordination between NextEra, federal and ORO	B.1.a of CEP.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	agencies involved with a public information role in the emergency response. It is also a contact point for disseminating information to the public through the news media during severe emergencies.	PIOs regarding communications information to the public and the media.  NextEra provides space and equipment at their corporate facility to provide coordination of public information response activities with site and corporate JIS/JIC personnel.	No added, removed or altered commitments or change of intent.
85.		Letter of Agreement (LOA): a document executed between two or more parties outlining specific arrangements relating to the accomplishment of an action. Letters of agreement may cover personnel, equipment, or other types of emergency support, and may take the form of letters, contracts, purchase orders, or other procurement mechanisms.	Non-RIE Definition added to align fleet terms. No added, removed or altered commitments or change of intent.
86.	2.72 Limited Evacuation The orderly withdrawal of personnel from area(s) onsite. This may be a limited plant evacuation of a room, plant area, or building. It may also be a full evacuation of all non essential personnel from the site, both exclusion and protected areas.	[CEP—J.1.a] When a site evacuation occurs, ERO and other essential personnel respond to their designated response facilities/areas. Non-essential personnel inside the Protected Area typically exit to the OCA by following normal RP and Security processes and proceed to a designated assembly area. Further evacuation of non-essential personnel inside the OCA occurs as warranted for the particular site.	Non-RIE Definition removed. Term defined in Section J of CEP.
87.	2.73 Loss Failure of operability or lack of access to.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
88.	2.74 Lower To become progressively less in size, amount, number, or intensity.		Non-RIE  Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
89.	2.75 Lower Flammability Limit (LFL) The minimum concentration of a combustible substance that is capable of propagating a flame through a homogenous mixture of the combustible and a gaseous oxidizer.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
90.	2.76 Low Population Zone (LPZ) The area immediately surrounding the exclusion area		Non-RIE Definitions specific to Emergency

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	which includes a residential population of which the total number and density are such that appropriate protective actions can be readily taken in the event of a serious radiological accident (see Appendix C and Appendix J).		Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
91.	2.77 Maintain Take action, as necessary, to keep the value of the specified parameter within the applicable limits.		Non-RIE  Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
92.		Memorandum of Understanding (MOU): a document which details the respective authorities and responsibilities of the signatory organizations for specified radiological emergency response planning, preparedness, or response.	Non-RIE  Definition added to align fleet terms.  No added, removed or altered commitments or change of intent.
93.	2.78 Monitor Observe and evaluate at a frequency sufficient to remain apprised of the value, trend, and rate of change of the specified parameter.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
94.	2.79 Non Essential Personnel Those not needed to respond to the accident. In public communications, these people should be called "workers without emergency response duties."	[CEP—J.1.a] When a site evacuation occurs, ERO and other essential personnel respond to their designated response facilities/areas. Non-essential personnel inside the Protected Area typically exit to the OCA by following normal RP and Security processes and proceed to a designated assembly area. Further evacuation of non-essential personnel inside the OCA occurs as warranted for the particular site.	Non-RIE  Definition removed. Evacuation process defined in Section J.  No added, removed or altered commitments or change of intent.
95.	2.80 Normal Plant Operations Activities at the plant site associated with routine testing, maintenance, or equipment operations, in accordance with normal operating or administrative procedures. Entry into abnormal or emergency operating procedures, or deviation from normal security or radiological controls posture, is a departure from NORMAL PLANT OPERATIONS.		Non-RIE  Definition removed. Term is not applicable to formal definition and applies before, during and post event.
96.	2.81 Notify To give notice of or report the occurrence of; to make		Non-RIE Definition removed. Word has no

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	known to, to inform specified personnel; to advise; to communicate; to contact; to relay.		unique definition as applicable to Emergency Plan Section E of the CEP outlines who will be notified of events.  No added, removed or altered commitments or change of intent.
97.	2.82 Nuclear Regulatory Commission (NRC) The federal governmental agency that is responsible for the licensing and regulation of all activities related to the commercial use of radioactive materials, including the regulation and inspection of nuclear power plants.		Non-RIE Definition removed. Defined by government agencies. No added, removed or altered commitments or change of intent.
98.		Offsite Response Organization (ORO): state, tribal, or local governmental organization that is responsible for carrying out emergency response functions during a radiological emergency.	Non-RIE Definition added to align fleet terms. No added, removed or altered commitments or change of intent.
99.	2.83 Offsite The area beyond the exclusion area of NextEra Energy Point Beach.	Offsite: the area outside the Protected Area.	Editorial  Definition revised to align fleet terms.  No added, removed or altered commitments or change of intent.
100.	2.84 Onsite All areas at NextEra Energy Point Beach within the exclusion and protected area.	Onsite: the area inside the Protected Area.	Editorial  Definition revised to align fleet terms.  No added, removed or altered commitments or change of intent.
101.	2.85 Open To position a valve or damper so as to allow flow of the process fluid. To break an electrical connection which removes a power supply from an electrical device. To make available for entry or passage by turning back, removing, or clearing away.		Non-RIE Definitions specific to Emergency Action Levels are defined in the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
102.	2.86 Operable Able to perform its intended function.		Non-RIE Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
103.	2.87 Operations Support Center (OSC) (Staging	[CEP – H.2]	Editorial

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	Area) (El. 8□ of the TSC building) This facility is an area for preparation and deployment of reentry and field monitoring teams. The OSC has access to emergency radiation monitoring and sampling equipment, protective and all weather equipment, and other miscellaneous equipment for use in an emergency.	The Operations Support Center (OSC) provides a dedicated location for coordinating and planning event response activities and for staging personnel and equipment. The OSC is sized to accommodate ERO responders.	Definition moved to section H.2 No added, removed or altered commitments or change of intent.
104.		Owner Controlled Area (OCA): That portion of company property surrounding and including the station which is subject to limited access and control as deemed appropriate.	Non-RIE Definition added to align fleet terms. No added, removed or altered commitments or change of intent.
105.	2.88 Perform To carry out an action; to accomplish; to affect; to reach an objective.		Non-RIE  Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
106.		Planning Standard (PS): one of the 16 emergency preparedness planning standards established in 10 CFR 50.47(b) that the emergency plan must meet and which are supported by the corresponding sections of 10 CFR 50 Appendix E.	Non-RIE Definition added to align fleet terms. No added, removed or altered commitments or change of intent.
107.	2.89 Plume Describes the shape and location of the radioactive material released to the atmosphere from a nuclear plant in an accident.		Non-RIE Definition removed. Word has no unique definition as applicable to Emergency Plan. Section I of the CEP outlines action taken for the release of radioactive materials. No added, removed or altered commitments or change of intent.
108.	2.90 Plume Exposure Pathway The principal exposures from this pathway are whole body external exposure to gamma radiation from the plume and from deposited material, and internal exposure from inhalation of radioactive gas from the passing radioactive plume. Depending on the nature of the meteorological and radiological conditions, the time of potential exposure could range from hours to days.	Plume Exposure Pathway: a term describing the means by which whole body radiation exposure occurs as a result of immersion in a gaseous release of radioactive material. The principal exposure sources from this pathway are: (a) whole body external exposure to gamma radiation from the plume and from deposited materials, and (b) inhalation exposure from the passing radioactive plume. The duration of principal potential exposures could range in length from 30 minutes to days.	Editorial Definition revised to align fleet terms. No added, removed or altered commitments or change of intent.

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109.		Plume Exposure Pathway Emergency Planning Zone: a geographic area approximately 10 miles in radius surrounding a commercial NPP.	Non-RIE Definition added to align fleet terms. No added, removed or altered commitments or change of intent.
110.		Post-Plume Phase: includes response activities that occur after a release has been terminated. Also known as the "Environmental Phase".	Non-RIE Definition added to align fleet terms. No added, removed or altered commitments or change of intent.
111.	2.91 NextEra Energy Point Beach, LLC A two unit pressurized water nuclear power plant located on a 1,260 acre site in the town of Two Creeks, Wisconsin. The plant is an indirect, wholly owned subsidiary of NextEra Energy, Inc.	[PBN Annex – Introduction] The PBN is a two unit pressurized water nuclear power plant located on a 1,260 acre site in the town of Two Creeks, Wisconsin. The plant is owned and operated by NextEra Energy Point Beach, LLC, an indirect, wholly owned subsidiary of NextEra Energy, Inc.	Editorial  Definition revised to align fleet terms.  No added, removed or altered commitments or change of intent.
112.	2.92 Population at Risk Those persons for whom protective actions are being, or would be, taken.	<ul> <li>[CEP – J.6] NextEra sites have developed PARs, in accordance with agreements made with the state agencies, for the plume exposure pathway EPZ that include evacuation, sheltering, and recommendations for radioprotective Potassium lodide use based on the following:         <ul> <li>NUREG-0654/FEMA-REP-1, Supplement 3, Guidance for Protective Action Strategies, November 2011</li> <li>EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, May 1992</li> <li>Guidance for Industry, KI in Radiation Emergencies, Questions and Answers, FDA, December 2002</li> </ul> </li> </ul>	Non-RIE Definition removed. Section J of the CEP discusses protective actions for individuals within the Plume Exposure Pathway
113.		Potassium lodide (KI): a prophylactic compound containing a stable (i.e., non-radioactive) form of iodine that can be used effectively to block the uptake of radioactive iodine by the thyroid gland in a human being.	Non-RIE Definition added to align fleet terms. No added, removed or altered commitments or change of intent.
114.	2.93 Primary System The pipes, valves, and other equipment which connect directly to the Reactor Vessel or reactor		Non-RIE Definitions specific to Emergency Action Levels are defined in each

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	coolant system such that a reduction in Reactor Vessel pressure will effect a lowering in the steam or water being discharged through an unisolated break in the system.		the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
115.	2.94 Projected Dose The estimated dose that would be received by individuals if no protective actions were taken following a release of radioactive material.		Non-RIE Definition removed. Section I.1.b of the CEP discusses estimation of projected doses.
116.	2.95 Protected Area The Protected Area with regards to the Emergency Action Levels, is the area within the double security fence surrounding the power block.	Protected Area: the area (within the Owner Controlled Area) occupied by the nuclear unit(s) and associated equipment and facilities enclosed within the security perimeter fence. The area within which accountability of personnel is maintained in an emergency when required.	Editorial Definition revised to align fleet terms. No added, removed or altered commitments or change of intent.
117.	2.96 Protective Actions Those measures taken in anticipation of or after an inadvertent release of radioactive material for the purpose of preventing or minimizing radiological exposures to persons that potentially could occur if the actions were not taken.	[CEP – J.1] NextEra maintains procedures to provide for a range of protective actions for all areas controlled by the site. Protective actions have been developed for radiological incidents and to protect personnel during hostile actions directed at the site.	Non-RIE  Definition removed. Section J of the CEP discusses protective actions for site personnel and recommended actions for offsite populations.  No added, removed or altered commitments or change of intent.
118.	2.97 Protective Action Guides (PAGs) The projected radiological dose (including dose commitment values) at or above which protective actions may be warranted.	Protective Action Guide (PAG): The projected dose to an individual, resulting from a radiological incident at which a specific protective action to reduce or avoid that dose is warranted.	Editorial Definition revised to align fleet terms. No added, removed or altered commitments or change of intent.
119.	2.98 Protective Action Recommendation (PAR) Protective Action Recommendations are made by the utility to the state and county governments in order to protect the health and safety of the public. The state and county government may implement a PAR of evacuate or shelter in place at their discretion.	Protective Action Recommendation (PAR): a formal advisement from a NPP licensee to state and/or county government officials, or from state officials to other offsite officials, concerning emergency measures that should be taken to protect the public from exposure to radiation.	Editorial Definition revised to align fleet terms. No added, removed or altered commitments or change of intent.
120.	2.99 Radiation Control Area (RCA) The area within the protected area in which radioactive materials and radiation are present or could normally be expected to be present in sufficient quantities to require protective measures. This area typically includes the containments, facades, auxiliary		Non-RIE Definition removed. Definitions for radiological areas are defined by Radiation Protection procedures.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	building, the area surrounding these buildings, and parts of the service building. This area is controlled by administrative means.		
121.		Radioprotective Drug: a chemical compound or substance serving to protect or aid in protecting against the injurious effects of radiation.	Non-RIE Definition added to align fleet terms. No added, removed or altered commitments or change of intent.
122.	2.100 Radiological Emergency A radiological emergency is defined as an accident that may result in some loss of control of radioactive materials or may involve a hazard or potential hazard to the health and safety of people, or to the safety of property or environment.	[CEP – D.1] NextEra has established and maintains a standard emergency classification and emergency action level scheme.	Non-RIE  Definition removed. "Radiological Emergency" as applicable to the Emergency Plan are determined by The EALs
123.		Reasonable Assurance: a determination that ORO and utility plans and preparedness are adequate to protect public health and safety in the emergency planning areas of commercial NPPs.	Non-RIE Definition added to align fleet terms. No added, removed or altered commitments or change of intent.
124.		Reception Center: a pre-designated facility located outside the plume exposure pathway EPZ at which the evacuated public can register; receive radiation monitoring and decontamination; receive assistance in contacting others; receive directions to congregate care centers; reunite with others; and receive general information. It generally refers to a facility where monitoring, decontamination, and registration of evacuees are conducted. A reception center is also referred to as a registration center or public registration and decontamination center.	Non-RIE Definition added to align fleet terms. No added, removed or altered commitments or change of intent.
125.	2.101 Recovery Operations Those operations taken after the emergency to restore the plant as nearly as possible to its pre emergency condition.	[CEP – M.2] The recovery activities would be managed much like a normal outage, except those certain activities unique to the post-accident situation may be controlled by the recovery organization. The recovery organization would function as a matrix management organization to coordinate activities with the normal company organization.	Non-RIE Definition removed. Recovery actions are discussed in Section M of the CEP. No added, removed or altered commitments or change of intent.
126.	2.102 Remove To change the location or position of.		Non-RIE Definitions specific to Emergency Action Levels are defined in each

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
			the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
	2.103 Report To describe as being in a specific state.		Non-RIE Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
128.	2.104 Require To demand as necessary or essential.		Non-RIE  Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
129.	2.105 Restore Take the appropriate action required to return the value of an identified parameter to within the acceptable limits.		Non-RIE  Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
130.	2.106 Rise Describes an increase in a parameter as the result of an operator or automatic action. To become progressively greater in size, amount, number or intensity.		Non-RIE  Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
131.	2.107 Ruptured In a steam generator, existence of primary to secondary leakage of a magnitude sufficient to require or cause a reactor trip and safety injection.		Non-RIE  Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
132.	2.108 Sabotage Deliberate damage, misalignment, or mis operation of plant equipment with the intent to render the equipment inoperable. Equipment found tampered with or damaged due to malicious mischief may NOT meet the definition of SABOTAGE until this		Non-RIE  Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)

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	determination is made by security supervision.		
133.	2.109 Safe Plant Shutdown Hot or cold shutdown (reactor subcritical) with control of coolant inventory and decay heat removal.		Non-RIE Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
134.	2.110 Safe Shutdown System All cables, components, panels, power supplies, etc., necessary for a system to perform a safe shutdown function. Safe shutdown functions include: reactivity control, reactor coolant makeup, reactor heat removal, process system monitoring for variables necessary to control these functions and supporting functions such as component cooling, lubrication, etc., necessary for the operation of safe shutdown equipment.		Non-RIE  Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
135.	2.111 Sample To perform an analysis on a specified media to determine its properties.		Non-RIE  Definition removed. There are no unique definitions for "Sample" as applicable to the Emergency Plan No added, removed or altered commitments or change of intent.
136.	2.112 Secure (Owner Controlled Area and Protected Area) Term used after response to a HOSTILE ACTION event within the Protected Area and Owner Controlled Area. "Secure" indicates the lead law enforcement officer in charge, in concert with PBNP Security, has determined that no active hostile threat exists on site.		Non-RIE  Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
137.	2.113 Security Building (Extension Building) The building inside the protected area containing the Central Alarm Station and the Security Manager's office, and one of the Fitness for Duty testing areas. Office areas unrelated to security are also in the building.		Non-RIE Definition removed. Term defined by Security Plan. No added, removed or altered commitments or change of intent.
138.	2.114 Security Condition Any Security Event as listed in the approved security contingency plan that constitutes a		Non-RIE Definitions specific to Emergency Action Levels are defined in each

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**Current Emergency Plan Common Emergency Plan and Site Annex** Change Type threat/compromise to site security, threat/risk to site the Site Emergency Action Level personnel, or a potential degradation to the level of (EAL) Technical Basis Document safety of the plant. A SECURITY CONDITION does (TBD) not involve a HOSTILE ACTION. 139. 2.115 Severe Accident Management Guidelines Non-RIE (SAMG) Definition removed. Term defined Guidance documents developed to assist in the by other required program. management of accidents significantly beyond that for No added, removed or altered which the plant was designed. Goal is to mitigate core commitments or change of intent. damage and maintain the containment of fission products. 2.116 Shutdown Non-RIE 140. To perform operations necessary to cause equipment Definitions specific to Emergency to cease or suspend operation: to stop. "Shutdown Action Levels are defined in each unnecessary equipment." the Site Emergency Action Level (EAL) Technical Basis Document (TBD) 141. 2.117 Significant Transient Non-RIE An UNPLANNED event involving one or more of the Definitions specific to Emergency following: (1) automatic turbine runback >25% Action Levels are defined in each thermal reactor power. (2) electrical load rejection the Site Emergency Action Level >25% full electrical load, (3) Reactor Trip, (4) Safety (EAL) Technical Basis Document Injection Activation, or (5) thermal power oscillations (TBD) >10%. 142. 2.118 Site Area Emergency ICEP - D.1] No Change Events are in process or have occurred which involve 1. Site Area Emergency (SAE) Definition moved to Section D of an actual or likely major failures of plant functions CEP Events are in progress or have occurred which needed for protection of the public or HOSTILE involve actual or likely major failures of plant functions ACTION that results in intentional damage or needed for protection of the public or hostile action malicious acts: (1) toward site personnel or that results in intentional damage or malicious acts; 1) equipment that could lead to the likely failure of or (2) toward site personnel or equipment that could lead to that prevent effective access to equipment needed for the likely failure of or; 2) that prevent effective access the protection of the public. Any releases are not to, equipment needed for the protection of the public. expected to result in exposure levels which exceed Any releases are not expected to result in exposure EPA Protective Action Guideline exposure levels levels which exceed EPA PAG exposure levels beyond the site boundary. beyond the site boundary. Site Boundary: the line beyond which the land or 2.119 Site Boundary Non-RIE 143. Per dose assessment methodology, the site boundary property is not owned or controlled by the licensee. Definition revised to align fleet is approximately a one mile radius around the site terms. Protected Area. No added, removed or altered

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			commitments or change of intent.
144.	2.120 Site Boundary Control Center (SBCC) This building is located approximately one mile southwest of NextEra Energy Point Beach at the south entrance to the plant site.		Non-RIE Definition removed. Term defined by Security Plan. No added, removed or altered commitments or change of intent.
145.	2.121 Stable (Protected Area) Term used during the response to a HOSTILE ACTION event within the Protected Area. "Stable" indicates the lead law enforcement officer in charge, in concert with PBNP Security, has determined that the immediate adversarial threat has been neutralized and that limited, Security-escorted personnel movement is permitted.		Non-RIE Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
146.	2.122 Strike Action A work stoppage within the PROTECTED AREA by a body of workers to enforce compliance with demands made on NextEra Energy Point Beach. The STRIKE ACTION must threaten to interrupt NORMAL PLANT OPERATIONs.		Non-RIE Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
147.		<b>Total Effective Dose Equivalent (TEDE):</b> the sum of the deep dose equivalent (for external exposures) and committed effective dose equivalent (for internal exposures).	Non-RIE  Definition added to align fleet terms.  No added, removed or altered commitments or change of intent.
148.	2.123 Technical Support Center (TSC) This facility is within two minutes walking distance of the Control Room and operates under the direction of the Emergency Coordinator. The facility has the capability to supply and display technical information for use by technical and designated management personnel in support of reactor operations and Control Room functions during emergency and recovery operations. The TSC has its own emergency ventilation system.	[CEP – H.1] The Technical Support Center (TSC) provides a dedicated location for management and technical support to operations personnel and to relieve the operations staff of emergency response actions and communications not related to plant system manipulations. The TSC is sized to accommodate ERO responders and NRC representatives.	Editorial TSC defined in Section H.1 of CEP. No added, removed or altered commitments or change of intent.
149.		<b>Transient Population:</b> persons who do not permanently reside in the plume exposure pathway EPZ but may be present during an emergency.	Non-RIE Definition added to align fleet terms. No added, removed or altered commitments or change of intent.
150.	2.124 Trip To de energize a pump or fan motor; to position a		Non-RIE

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	breaker so as to interrupt or prevent the flow of current in the associated circuit; to manually activate a semi-automatic feature.		Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
151.	2.125 TSC Library These supporting documents are located in the Admin Building, consisting of procedures for all disciplines, and a complete set of drawings available using electronic document management system(s). (Reference 3.2).	[CEP – H.1] The TSCs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.	Non-RIE TSC defined in Section H.1 of CEP. No added, removed or altered commitments or change of intent.
152.		Thyroid Committed Dose Equivalent (CDE): the dose to the thyroid that will be received from an intake of radioactive material by an individual during the 50-year period following the intake (10 CFR 20.1003).	Non-RIE Definition added to align fleet terms. No added, removed or altered commitments or change of intent.
153.	2.126 Unavailable Not able to perform its intended function.		Non-RIE  Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
154.	2.127 Uncontrolled An evolution lacking control but is not the result of an operator action.		Non-RIE Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
155.	2.128 Unplanned A parameter change or an event that is not the result of an intended evolution and requires corrective or mitigative actions.		Non-RIE Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
156.	2.129 Unusual Event Events are in process or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or	[CEP- D.1]  1. Unusual Event (UE)  Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of	No Change Definition moved to Section D of CEP

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	monitoring are expected unless further degradation of safety systems occurs.	radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.	
157.	2.130 Valid An indication, report, or condition is considered to be VALID when it is verified by (1) an instrument channel check, or (2) indications on related or redundant indicators, or (3) by direct observation by plant personnel, such that doubt related to the indicator operability, the condition existence, or the report accuracy is removed. Implicit in this definition is the need for timely assessment.		Non-RIE Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
158.	2.131 Vent To open an effluent (exhaust) flowpath from an enclosed volume; to reduce pressure in an enclosed volume.		Non-RIE Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
159.	2.132 Verify To confirm a condition and take action to establish that condition if required. "Verify reactor trip."		Non-RIE Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
160.	2.133 Visible Damage Damage to a component or structure that is readily observable without measurements, testing, or analysis. The visual impact of the damage is sufficient to cause concern regarding the operability or reliability of the affected component or structure. Damage resulting from an equipment failure and limited to the failed component (i.e., the failure did not cause damage to a structure or any other equipment) is not VISIBLE DAMAGE.		Non-RIE Definitions specific to Emergency Action Levels are defined in each the Site Emergency Action Level (EAL) Technical Basis Document (TBD)
161.	2.134 Vital Area Any area, normally within the PROTECTED AREA, which contains equipment, systems, components, or material, the failure, destruction, or release of which could directly or indirectly endanger the public health and safety by exposure to radiation.		Non-RIE Definition removed. Term defined by Security Plan. No added, removed or altered commitments or change of intent.

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162.	2.135 Wisconsin Emergency Management (WEM) A division of the State of Wisconsin Department of Military Affairs. The WEM coordinates the state's expertise required to deal with a given emergency. The types of emergencies to which they may respond include: chemical spills, fires, tornadoes, flooding, public employee strikes and nuclear plant accidents. The WEM Director reports to the Governor. The WEM makes recommendations to the governor regarding evacuation and other protective actions.	[PBN Annex – A.1.a] a. Wisconsin Department of Military Affairs, WEM The Administrator of WEM, Department of Military Affairs, has been designated by the Governor of the State of Wisconsin as the state officer to assume the primary responsibility and authority for radiological emergency response planning.	Non-RIE  Definition removed. State departments defined by State. Operational roles of organization are outlined in section A of the CEP and site annex No added, removed or altered commitments or change of intent.
	6. Section EP 3.0, Summary of E-Plan, R28		
163.	1.0 GENERAL The Emergency Plan defines the actions and responsibilities of Emergency Response personnel in the event of an emergency and delineates the support required from offsite groups during certain specific emergency situations. Emergency classifications graded by severity are incorporated in the Emergency Plan. These classifications describe the degree of response by onsite and offsite personnel and agencies. The Emergency Plan is based on the following key objectives. (B 1):	[CEP – Introduction] The NextEra Common Emergency Plan provides the means to protect the health and safety of the general public, persons temporarily visiting or assigned to nuclear power plants operated by NextEra, and plant employees. NextEra operates the Point Beach, Seabrook Station, Saint Lucie, and Turkey Point nuclear plants.	Editorial No added, removed or altered commitments or change of intent.
164.	1.1 Identification and Evaluation Identification and evaluation of various types of emergencies which could potentially occur at the plant and which could affect members of the public or plant personnel and equipment.	[CEP – D.1]  NextEra has established and maintains a standard emergency classification and emergency action level scheme. The EAL technical basis manual is referenced in the site annexes. The spectrum of postulated emergency events is categorized into the following four (4) emergency classification levels (ECLs):  Unusual Event  Alert  Site Area Emergency  General Emergency	Editorial No added, removed or altered commitments or change of intent.
165.	1.2 Organization and Direction Organization and direction of plant personnel actions to limit the consequences of an incident.	[CEP – B.1.a] The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):	Editorial  No added, removed or altered commitments or change of intent.
166.	1.3 Organization and Control	[CEP – B.1.a]	Editorial

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	Organization and control of onsite and offsite surveillance activities to assess the extent and significance of any release of radioactive material.	The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):  1. Control Room (CR)  A. Shift Manager  • Effluent Release and Dose Assessment  B. Radiation Protection Technician  • Radiological Monitoring Activities  2. Technical Support Center (TSC)  H. TSC Radiation Protection Coordinator  • Effluent Release and Dose Assessment  4. Emergency Operations Facility (EOF)  B. EOF Radiation Protection Coordinator  • Effluent Release and Dose Assessment  E. EOF Dose Assessor  • Effluent Release and Dose Assessment  F. Remote Dose Assessor  • Effluent Release and Dose Assessment	No added, removed or altered commitments or change of intent.
167.	1.4 Delineation of Protective Actions Delineation of protective actions and measures which are based upon and are generally consistent with the Emergency Action Levels (EALs) specified in NEI 99 01 (NUMARC/NESP 007), Methodology for Development of Emergency Action Levels, Revision 6 (B 2, B 3). The protective actions and measures are intended to protect members of the public and/or plant personnel and equipment in the event of an accident, including measures for recovery of and reentry to the facility.	[CEP – D.1.a] Emergency Action Levels (EALs) at NextEra sites have been developed in accordance with NRC endorsed guidance. This guidance and the NextEra site EAL schemes have been approved by the NRC. [CEP – J.1] NextEra maintains procedures to provide for a range of protective actions for all areas controlled by the site. Protective actions have been developed for radiological incidents and to protect personnel during hostile actions directed at the site. [CEP – J.6] NextEra sites have developed PARs, in accordance with agreements made with the state agencies, for the plume exposure pathway EPZ that include evacuation, sheltering, and recommendations for radioprotective Potassium lodide use based on the following:  NUREG-0654/FEMA-REP-1, Supplement 3, Guidance for Protective Action Strategies,	Editorial  No added, removed or altered commitments or change of intent.

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		<ul> <li>November 2011</li> <li>EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, May 1992</li> <li>Guidance for Industry, KI in Radiation Emergencies, Questions and Answers, FDA, December 2002</li> </ul>	
168.	1.5 Notification of Offsite Authorities Notification of offsite authorities as required, and coordination of response activities with offsite support groups.	[CEP – E.1]  2. ORO Event Notification NextEra, in cooperation with the OROs, has established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes are made to PARs, a notification to the OROs is made within 15 minutes.  Receipt location of notification messages is site specific. ORO notification locations are described in the site annexes.  3. NRC Event Notification NextEra will notify the NRC using ENS as soon as possible after notification of the OROs, and not later than 60 minutes after event declaration.  An accelerated call to the NRC will be made immediately after notification of local law enforcement agencies (LLEAs), or within about 15 minutes of the recognition of the security-based threat (discovery of an imminent threat or attack against the site), to ensure the NRC is notified of safeguards events. The information provided in the accelerated NRC notification will be limited to the following:  • Site name.  • ECL if determined prior to the accelerated notification.  • Nature of the threat and the attack status.  [CEP – C.3]  Coordination of response actions and exchange of information among Emergency Directors from appropriate response organizations is provided via pre-designated communication links between NextEra, the NRC, and ORO EOCs.	Non-RIE Additional details added. No added, removed or altered commitments or change of intent.

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	7. Section EP 4.0, Emergency Conditions, R48		
169.	The Emergency Plan is based on potential situations ranging from incidents where effects on the plant status are negligible to highly unlikely major releases of radioactivity which could affect members of the offsite public. Each classification incorporates a specific emergency response organization alerting and mobilization procedure and a set of actions to be taken by emergency response organization personnel. Each classification is given a designation to indicate immediate required response of plant personnel when an emergency is announced over the public address system.	<ul> <li>[CEP – D1]</li> <li>NextEra has established and maintains a standard emergency classification and emergency action level scheme. The EAL technical basis manual is referenced in the site annexes. The spectrum of postulated emergency events is categorized into the following four (4) emergency classification levels (ECLs): <ul> <li>Unusual Event</li> <li>Alert</li> <li>Site Area Emergency</li> <li>General Emergency</li> </ul> </li> <li>A summary of response actions taken at each ECL is as follows: <ul> <li>1. Unusual Event (UE)</li> <li>Initial and follow-up event notification to the OROs and NRC.</li> </ul> </li> <li>Notification of ERO personnel. This is an information only notification and does not require activation of emergency facilities or response organizations. Any Emergency Response Facility (ERF) may be activated at the discretion of the Emergency Director.</li> <li>Alert</li> <li>Initial and follow-up event notification to the OROs and NRC.</li> <li>Augmentation of the shift ERO (refer to Element A.1.a) by activating the Technical Support Center, Operations Support Center and Emergency Operations Facility.</li> <li>The Joint Information System shall be established at this ECL, with Joint Information Center activation determined in coordination with the offsite agencies.</li> <li>If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.</li> </ul>	Ro added, removed or altered commitments or change of intent.

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		3. Site Area Emergency	
		<ul> <li>Initial and follow-up event notification to the OROs and NRC.</li> </ul>	
		<ul> <li>Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.</li> </ul>	
		The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).	
		• Implementation of onsite protective actions (refer to Section J).	
		If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.	
		Offsite precautionary actions may be recommended under certain conditions (as required by site specific OROs).	
		4. General Emergency	
		Initial and follow-up event notification to the OROs and NRC.	
		<ul> <li>Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.</li> </ul>	
		The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).	
		• Implementation of onsite protective actions (refer to Section J) if not previously performed.	
		If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.	
		Offsite protective action recommendations are communicated to the OROs and NRC.	
170.	Prompt notification of offsite authorities (federal,	[CEP – E.1]	Editorial
	state, and county) is required and will be provided for any and all emergency declarations. Periodic updates also will be provided to offsite authorities while a classification remains in effect.	2. ORO Event Notification NextEra, in cooperation with the OROs, has established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes are made	No added, removed or altered commitments or change of intent.
		to PARs, a notification to the OROs is made within 15	

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#	Current Emergency Plan	minutes.  Receipt location of notification messages is site specific. ORO notification locations are described in the site annexes.  3. NRC Event Notification  NextEra will notify the NRC using ENS as soon as possible after notification of the OROs, and not later than 60 minutes after event declaration.  An accelerated call to the NRC will be made immediately after notification of local law enforcement agencies (LLEAs), or within about 15 minutes of the recognition of the security-based threat (discovery of an imminent threat or attack against the site), to ensure the NRC is notified of safeguards events. The information provided in the accelerated NRC notification will be limited to the following:  • Site name.  • ECL if determined prior to the accelerated notification.  • Nature of the threat and the attack status.  [CEP – E.3]  In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding event conditions and response actions.	Change Type
171.	The following emergency classification system is based on NEI 99 01, Methodology for Development of Emergency Action Levels, Revision 6. Within each classification is a description of immediate plant actions as well as recommended state and local government actions.	[CEP – D.1.a] Emergency Action Levels (EALs) at NextEra sites have been developed in accordance with NRC endorsed guidance. This guidance and the NextEra site EAL schemes have been approved by the NRC.	Editorial  No added, removed or altered commitments or change of intent.
172.	1.1 Unusual Event Events are in process or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.  • Potential degradation of the level of safety of the	[CEP – D.1]  1. Unusual Event (UE)  Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.	Non-RIE Removed additional wording defining UE. No added, removed or altered commitments or change of intent.

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	<ul> <li>plant is indicated primarily by exceeding plant technical specification Limiting Condition of Operation (LCO) allowable action statement time for achieving required mode change.</li> <li>Precursors of more serious events may be included because precursors represent a potential degradation in the level of safety of the plant.</li> <li>Minor releases of radioactive materials are included. In this emergency class, however, releases do not require monitoring or offsite response (e.g., dose consequences of less than 10 millirem).</li> </ul>		
173.	An Unusual Event is declared as required by the initiating conditions and EALs given in Appendix B of the Emergency Plan.	[PBN Annex – D.1] The PBN Emergency Action Level (EAL) scheme is documented in EP-PBN-111, PBN EAL Technical Basis Manual.	Editorial No added, removed or altered commitments or change of intent.
174.	Onsite protective actions may include a limited plant assembly/evacuation.	[CEP – J.4] The emergency alarm, together with the public address system, is used to alert and notify on-site personnel of the need for assembly at a Site Area or General Emergency classification level (or earlier at the discretion of the Emergency Director).	Non-RIE The ED may direct protective measures at any ECL No added, removed or altered commitments or change of intent.
175.	The Unusual Event status will be maintained until an escalation in emergency classification is initiated or a termination of the event is made in accordance with EP Appendix B. Offsite authorities will be informed with the completion of the necessary documentation as specified in the EPIPs.	[CEP – D.3] Emergency plan implementing procedures provide instructions to ERO personnel for response activities primarily associated with assessment, classification, notification and protective actions. Other functions such as communications, termination and recovery are also addressed.  [CEP – E.3] In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding event conditions and response actions.	Wording on maintaining ECL removed, reclassification and termination addressed in Section D. No added, removed or altered commitments or change of intent.
176.	1.2 Alert Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life-threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION. Any releases are expected to be	[CEP – D.1] 2. Alert Events are in progress, or have occurred, which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life-threatening risk to site personnel or damage to site equipment because of	Non-RIE Removed additional wording defining Alert. No added, removed or altered commitments or change of intent.

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	<ul> <li>limited to small fractions of the EPA Protective Action Guideline exposure levels.</li> <li>Rather than discussing the distinguishing features of "potential degradation" and "potential substantial degradation," a comparative approach would be to determine whether increased monitoring of plant functions is warranted at the Alert level as a result of safety system degradation. This addresses the operations staff's need for help, independent of whether an actual decrease in plant safety is determined. This increased monitoring can then be used to better determine the actual plant safety state, whether escalation to a higher emergency class is warranted, or whether de escalation or termination of the emergency class declaration is warranted. Dose consequences from these events are small fractions of the EPA PAG plume exposure levels, i.e., about 10 millirem to 100 millirem TEDE.</li> </ul>	hostile action. Any releases are expected to be small fractions of the EPA Protective Action Guideline exposure levels.	
177.	An Alert is declared as required by the initiating conditions and EALs given in Appendix B of the Emergency Plan.	[PBN Annex – D.1] The PBN Emergency Action Level (EAL) scheme is documented in EP-PBN-111, PBN EAL Technical Basis Manual.	Editorial  No added, removed or altered commitments or change of intent.
178.	The plant emergency response will be augmented by the activation of the TSC, OSC, EOF, JIC, and supporting emergency response organization personnel. There will be a provision for the Emergency Coordinator at the TSC and the Emergency Director at the EOF to provide updates to offsite authorities.	<ul> <li>[CEP – D.3]</li> <li>A summary of response actions taken at each ECL is as follows:</li> <li>Alert</li> <li>Initial and follow-up event notification to the OROs and NRC.</li> <li>Augmentation of the shift ERO (refer to Element A.1.a) by activating the Technical Support Center, Operations Support Center and Emergency Operations Facility.</li> <li>The Joint Information System shall be established at this ECL, with Joint Information Center activation determined in coordination with the offsite agencies.</li> <li>If a release is occurring, monitoring teams are available for dispatch and offsite dose projections</li> </ul>	Editorial  No added, removed or altered commitments or change of intent.

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		are developed.	
179.	An evacuation, or an assembly and subsequent evacuation, shall be ordered upon the classification of an Alert or higher.		Non-RIE Evacuation, or an assembly and subsequent evacuation at an Alert now optional. This is consistent with NUREG 0654, R2 guidance.
180.	The Alert status will be maintained until an escalation or reduction in emergency classification occurs or the status is terminated in accordance with EP Appendix B. Offsite authorities will be informed, which includes completion of the necessary documentation as specified in the EPIPs.	[CEP – D.3] Emergency plan implementing procedures provide instructions to ERO personnel for response activities primarily associated with assessment, classification, notification and protective actions. Other functions such as communications, termination and recovery are also addressed.  [CEP – E.3] In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding event conditions and response actions.	Wording on maintaining ECL removed, reclassification and termination addressed in Section D. No added, removed or altered commitments or change of intent.
181.	<ul> <li>1.3 Site Area Emergency Events are in process or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public or HOSTILE ACTION that results in intentional damage or malicious acts: (1) toward site personnel or equipment that could lead to the likely failure of or (2) that prevent effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels beyond the site boundary.</li> <li>The discriminator (threshold) between Site Area Emergency and General Emergency is whether or not the EPA PAG plume exposure levels are expected to be exceeded outside the site boundary.</li> <li>This threshold, in addition to dynamic dose assessment considerations discussed in the EAL guidelines, clearly addresses NRC and offsite emergency response agency concerns as to timely declaration of a General Emergency.</li> </ul>	[CEP – D.1]  3. Site Area Emergency (SAE)  Events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public or hostile action that results in intentional damage or malicious acts; 1) toward site personnel or equipment that could lead to the likely failure of or; 2) that prevent effective access to, equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA PAG exposure levels beyond the site boundary.	Non-RIE Removed additional wording defining Alert. No added, removed or altered commitments or change of intent.

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182.	A Site Area Emergency is declared as required by the initiating conditions and EALs given in Appendix B of the Emergency Plan.	[PBN Annex – D.1] The PBN Emergency Action Level (EAL) scheme is documented in EP-PBN-111, PBN EAL Technical Basis Manual.	Editorial  No added, removed or altered commitments or change of intent.
183.	Therefore, if not already accomplished, activation of the TSC, OSC, EOF, JIC, and supporting emergency response personnel will commence.  Onsite protective actions of a plant and exclusion area assembly and evacuation will be initiated. There will be a deployment of onsite and offsite radiological field monitoring teams to assess radiation levels, with communication systems to transmit information back to the EOF.	<ul> <li>[CEP - D.3]</li> <li>A summary of response actions taken at each ECL is as follows:</li> <li>3. Site Area Emergency</li> <li>Initial and follow-up event notification to the OROs and NRC.</li> <li>Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.</li> <li>The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).</li> <li>Implementation of onsite protective actions (refer to Section J).</li> <li>If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.</li> <li>Offsite precautionary actions may be recommended under certain conditions (as required by site specific OROs).</li> </ul>	Editorial  No added, removed or altered commitments or change of intent.
184.	There will be a provision for the Emergency Coordinator at the TSC and Emergency Director at the EOF to provide updates to offsite authorities. These updates will be composed of meteorological information, projected dose estimates based on both actual and projected long term release (calculated on foreseeable unit conditions), and current plant status. The JIC Manager will establish and maintain communications with the EOF to provide information to the news media on the status of the incident.	[CEP – E.3]  NextEra sites and OROs have established the content of the initial notification message to be used during an emergency. Minimum content of the initial notification will include the following:  The site's name  Time of event  The ECL  Protective Action Recommendation (PAR)  Whether a release is taking place In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding event conditions and response actions.  [CEP – G.2]	Non-RIE Several ERO Members are task with State and Local Event Notifications and Organizational Interface and Coordination. The CEP commits to use of JIS to provide information to the public through the Media.

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		NextEra Corporate Communications and business unit personnel maintain programs and processes for the coordination and dissemination of information to the public and media using JIS concepts. Specifically, the process provides a structure and system for developing and delivering coordinated interagency messages; developing, recommending, and executing public information plans and strategies; advising decision makers concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.	
185.	The declaration of a Site Area Emergency requires prompt notification to state and local authorities so they may activate their emergency operations centers (EOCs) and dispatch key emergency personnel, such as state and/or local monitoring teams, to assess offsite consequences.	[CEP – E.1] 2. ORO Event Notification NextEra, in cooperation with the OROs, has established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes are made to PARs, a notification to the OROs is made within 15 minutes.	Editorial  No added, removed or altered commitments or change of intent.
186.	This Site Area Emergency status will be maintained until an escalation in emergency classification occurs or Recovery is entered in accordance with EP Appendix B. Offsite authorities will be informed, which includes completion of the necessary documentation as specified in the EPIPs.	[CEP – D.3] Emergency plan implementing procedures provide instructions to ERO personnel for response activities primarily associated with assessment, classification, notification and protective actions. Other functions such as communications, termination and recovery are also addressed. [CEP – E.3] In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding event conditions and response actions.	Non-RIE Wording on maintaining ECL removed, reclassification and termination addressed in Section D. No added, removed or altered commitments or change of intent.
187.	1.4 General Emergency Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or HOSTILE ACTION that results in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective	[CEP – D.1] 4. General Emergency (GE) Events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or hostile actions that result in an actual loss of physical control of the facility.	No Change

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	Action Guideline exposure levels offsite for more than the immediate site area.	Releases can be reasonably expected to exceed EPA PAG exposure levels offsite for more than the immediate site area.	
188.	A General Emergency is declared as required by the initiating conditions and EALs given in Appendix B of the Emergency Plan.	[PBN Annex – D.1] The PBN Emergency Action Level (EAL) scheme is documented in EP-PBN-111, PBN EAL Technical Basis Manual.	Editorial  No added, removed or altered commitments or change of intent.
189.	If not already initiated, activation of the TSC, OSC, EOF, JIC and supporting emergency response organization personnel will commence. Onsite protective actions of a plant and exclusion area assembly and evacuation will be initiated. The onsite and offsite radiological field monitoring teams will be dispatched. The Emergency Coordinator at the TSC and the Emergency Director at the EOF will provide updates to appropriate offsite authorities. These updates will be composed of current plant status, radiological release status, meteorological information, radiological dose projections, and affected EPZ areas. At the JIC, the JIC Manager will establish and maintain communication with the EOF to provide information to the news media on the incident status.  Recommendations to state and local authorities would be to activate full scale emergency operations and shelter or evacuate the public in the affected areas as necessary. State and local authorities may implement protective action recommendations as specified in the EPIPs.	<ul> <li>[CEP - D.3]</li> <li>A summary of response actions taken at each ECL is as follows:         <ul> <li>General Emergency</li> <li>Initial and follow-up event notification to the OROs and NRC.</li> </ul> </li> <li>Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.</li> <li>The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).</li> <li>Implementation of onsite protective actions (refer to Section J) if not previously performed.</li> <li>If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.</li> <li>Offsite protective action recommendations are communicated to the OROs and NRC.</li> </ul>	Editorial  No added, removed or altered commitments or change of intent.
190.	The General Emergency status will be maintained until successful mitigation occurs allowing entry into Recovery in accordance with EP Appendix B. Offsite authorities will be informed, which includes completion of the necessary documentation as specified in the EPIPs.	[CEP – D.3] Emergency plan implementing procedures provide instructions to ERO personnel for response activities primarily associated with assessment, classification, notification and protective actions. Other functions such as communications, termination and recovery are also addressed.  [CEP – E.3] In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding	Non-RIE Wording on maintaining ECL removed, reclassification and termination addressed in Section D. No added, removed or altered commitments or change of intent.

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		event conditions and response actions.	
191.	2.0 SPECTRUM OF POSTULATED ACCIDENTS The accidents that could occur at all commercial nuclear power plants have been classified by the United States Nuclear Regulatory Commission (USNRC) (Appendix E 10 CFR 50) according to their severity of consequences and probability of occurrence. These accidents applicable to a pressurized water reactor like NextEra Energy Point Beach are addressed from the viewpoint of initiating events, alarm actuations, and/or associated readings. Emergency Classification, as Appendix B to this document, in no way concedes that all the listed scenarios are likely or even possible. This table is to be used by the plant operators as an emergency classification guide. Since some accident scenarios can be very complex, it is recognized that, with information available, knowledge and skill acquired, and years of operator training and experience, the swift classification of those accidents can be aided with a simplified table. Specific emergency operating procedures are not written for all the included accidents. In order to deal with unlikely and complex scenarios, the EPIPs provide for sequenced actions indicating clear direction to be followed by NextEra Energy Point Beach operators and emergency response personnel. EPIP 1.2.1 provides guidance for EPIP response to varying accident situations and conditions.	[PBN Annex – D.1] The PBN Emergency Action Level (EAL) scheme is documented in EP-PBN-111, PBN EAL Technical Basis Manual. [CEP – D.2] NextEra has and maintains the capability to assess, classify, and declare an emergency condition within 15 minutes after the availability of indications to plant operators that an EAL threshold has been met or exceeded. Details for classification timeliness criteria are documented in the site specific EAL Technical Bases Document.	Non-RIE Removed discussion of postulated accidents. These are contained in chapter 14 of the UFSAR, No added, removed or altered commitments or change of intent.
	8. EP 5.0, Organizational Control of Emergencies, R68		
192.	1.0 DISCUSSION In the event of an emergency, the normal station operational organization is supplemented with an organization specifically designed to control emergency situations. Depending on the severity of the emergency, the Emergency Organization may consist of an on shift emergency response organization, or of an augmented emergency response organization comprised of station, corporate and contract personnel. Table 5.1, Minimum Shift	[CEP – B.1.a] The requirements for on-shift operations staff, security force staff, and fire brigade/first aid staff are controlled by Technical Specifications and other licensing and administrative documents. Positions from these departments are described in the emergency plan only when assigned an emergency preparedness function that is performed during an emergency.  Site specific on-shift staffing analysis reports are	Editorial Normal plant organization described in UFSAR. Shift ERO positions outlined in Section B.1.a and PBN On-Shift Staffing Analysis. No added, removed or altered commitments or change of intent.

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	Staffing for Emergencies, provides minimum staffing requirements. This section describes the On shift, On site and Off site Emergency Organizations.	developed in accordance with 10 CFR 50 Appendix E.IV.A.9 and NEI 10-05. The site specific on-shift staffing analysis reports are maintained as part of the site emergency plans and are referenced in the site annexes.  [PBN Annex – B.1.a]  The PBN on-shift staffing analysis report has been developed in accordance with 10 CFR 50 Appendix E.IV.A.9 and NEI 10-05.  Refer to EP-PBN-112, PBN On-Shift Staffing Analysis.	
193.	2.0 NORMAL PLANT ORGANIZATION The Site Director has the overall responsibility and authority for the operation and technical support of Point Beach Nuclear Plant (PBNP). The Site Director and the nuclear organization have the overall responsibility and authority to ensure that all activities associated with PBNP are carried out with the highest standards of safety and ensuring the station is operated in accordance with (IAW) the licenses granted by the Nuclear Regulatory Commission (NRC), the Technical Specifications, and the requirements and commitments stated in the UFSAR. The onsite station organization is illustrated in Figure 5 1.	[CEP – B.1.a] A description of the normal site operating organization is contained in each sites' UFSAR (typically Chapter 13).	Editorial Normal plant organization described in UFSAR. No added, removed or altered commitments or change of intent.
194.	3.0 ONSITE EMERGENCY RESPONSE ORGANIZATION (ERO) The Emergency Response Organization (ERO) consists of personnel staffing in the Control Room, an Operations Support Center (OSC), a Technical Support Center (TSC), an Emergency Operations Facility (EOF), and a Joint Information Center (JIC).	[CEP – B.1.a] The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):  1. Control Room (CR)  2. Technical Support Center (TSC)  3. Operations Support Center (OSC)  4. Emergency Operations Facility (EOF)  5. Joint Information System (JIS) / Joint Information Center (JIC)	Editorial  No added, removed or altered commitments or change of intent.
195.	The PBNP ERO is supported by designated facilities as described in EP 7.0, Emergency Facilities and Equipment. The on shift emergency response organization is augmented at declaration of an Alert	[CEP – H and PBN Annex] H: Emergency Facilities and Equipment [CEP – Table B.1] Table establishes requirements for activation of ERO	Non-RIE  No added, removed or altered commitments or change of intent.  Section H of plan and PBN Annex

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	or higher emergency classification level.	at Alert level.	continue to describe Emergency Facilities and Equipment supporting ERO response
196.	In the event a member of the ERO minimum staff becomes incapacitated or is otherwise unavailable, they shall be replaced as soon as reasonably possible. Unit staff who are ERO members are governed by PBNP Technical Specification and its exceptions.		Non-RIE Removed wording Does not commit to any specific action outside Tech Specs.
197.	During normal station work hours, notification of on site ERO may occur via PA announcement and/or pagers.	[CEP F.1.c] Personnel within the Protected Area are notified of the emergency classification via the public address system. The sounding of alarms and announcement of the emergency classification and other pertinent data relating to the emergency classification are made over the public address system.	Editorial  No added, removed or altered commitments or change of intent.
198.	During off hours, notification of ERO is accomplished by activating the automated callout system and ERO pagers.	[CEP F.1.c]  NextEra sites use an automated ERO notification system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location.	Non-RIE Replaced pages with commitment to have multiple redundancies in ERO notification system.
199.	For an Unusual Event classification, on shift personnel respond and the event is directed from the Control Room and command of the situation remains there with the Shift Manager (SM) until termination/recovery or reclassification to a higher level emergency occurs. In the event of an Alert or higher classification level, the SM orders the activation of the TSC, OSC, EOF, and JIC. The on site ERO is directed by the Emergency Coordinator. The Emergency Director in the EOF provides overall coordination of the event and direction of the ERO. If the SM determines that an Alert or higher emergency exists, the on shift staff will assume an emergency mode of operation and the remaining ERO shall be activated. Initially, the on shift staff will	[CEP – B.2] The Shift Manager is the individual who is on-shift at all times and assumes the role of Emergency Director upon emergency declaration. As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures, The Shift Manager maintains overall command and control until relieved. [CEP – Table B.1] Table establishes requirements for activation of ERO at Alert level.	Editorial  No added, removed or altered commitments or change of intent.

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	be augmented by critical positions that are designated in Table 5.1. The goal is to accomplish this augmentation within 60 minutes for the TSC and OSC and 90 minutes for the EOF such that activation of TSC will be within 60 minutes and EOF will be within 90 minutes.  The SM will direct plant response, assess and control the emergency, and initiate the required plant and offsite notifications in accordance with Figures 5 6 and 5 7. If the SM is incapacitated, an Operating Supervisor (OS) will assume the responsibility and authority of the SM (until relieved by a qualified individual) and coordinate the plant response, including the initiation of offsite notifications.		
200.	3.1 On Shift Emergency Organization (B 1) Each operating shift is shown in Figure 5 2 and consists of the following positions: 3.1.1 The SM, who holds a Senior Reactor Operator (SRO) license, is in direct charge of all plant operations during their assigned shift and is directly responsible for actions of the crew. The SM will be in the Control Room and maintain responsibility for operation of plant equipment and controls during emergency conditions other than fires. The SM's emergency classification will be determined by the Emergency Action Levels (EALs) in Appendix B. The SM will assume the responsibility of the Emergency Coordinator (EC) and continue to assess the emergency until relieved of this responsibility by a qualified EC. If the incident is classified as an Alert or higher, the appropriate emergency response facilities as shown in Figures 5 3 through 5 5 will be activated.	[CEP B.1.a.1]  A. Shift Manager	Non-RIE  ERO function and task hierarchy updated consistent with current NRC and industry guidance.  Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
201.	3.1.2 Per Technical Specifications, the OSs hold SRO licenses. The OSs report to the SM in the Control Room. The OSs perform initial assessment and evaluation of any abnormalities or emergency	Event Termination	Non-RIE Removed discussion of non- Emergency Plan actions conducted by Shift Personnel required by

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	conditions. After the SM declares an emergency, the OSs maintain the normal duties of directing the Control Operators (COs) and the Auxiliary Operators (AOs).		USFAR and operations procedures.
202.	3.1.3 Per Technical Specifications, the COs hold Reactor Operator (RO) or SRO licenses. The COs report to the OSs and conduct the safe and proper operation of the unit at all times, and respond to emergency conditions, as necessary. A CO activates or verifies activation of the Emergency Response Data System (ERDS) at Alert or higher classification.	[CEP-C5] When an emergency occurs, ERO personnel will ensure ERDS operation as soon as possible but not later than one hour after an alert or higher emergency classification level is declared, in accordance with 10 CFR 50.72(a)(4).	Non-RIE  Removed discussion of non- Emergency Plan actions conducted by Shift Personnel required by USFAR and operations procedures. ERDS will always be activated and ERO will verify operation.
203.	3.1.4 Five AOs, with no license required, report to the OSs. AOs perform tasks assigned by the OSs.		Non-RIE Removed discussion of non- Emergency Plan actions conducted by Shift Personnel required by USFAR and operations procedures.
204.	3.1.5 Five Fire Brigade Members (FBMs) that are first aid and Cardiopulmonary Resuscitation (CPR) qualified (first responder). Three of these members will be AOs (from the five described in Step 3.1.4), one of which will be the Fire Brigade Leader (FBL). The remaining two members may be additional AOs and/or other FBMs. FBMs report to the OS/SM.		Non-RIE Removed discussion of non- Emergency Plan actions conducted by Shift Personnel required by USFAR and Fire Protection Plan.
205.	3.1.6 A minimum of two qualified Radiation Protection Technologists (RP Tech) are on each shift. During emergency situations the RP Techs report to the SM and responds to emergency conditions, as directed.	[CEP – Table B.1] On Shift (1) RP Technician (1) RP Qualified Individual	Non-RIE Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
206.	3.1.7 A minimum of one Chemistry Technician (Radiochemical Technician or Chem Tech) is on each shift. During emergency situations the Chem Tech reports to the SM and responds to emergency conditions, as directed.		Non-RIE Chemistry Tech removed from Emergency Plan – not required by NUREG 0654 R2. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
207.	3.1.8 Per Technical Specifications, the Shift Technical Advisor (STA) is available (within 10		Non-RIE Removed discussion of non-

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	minutes of the Control Room) to assist the SM in evaluation and assessment.		Emergency Plan actions conducted by Shift Personnel required by USFAR and operations procedures.
208.	3.1.9 One individual to serve as a Communicator. This position is filled by an individual knowledgeable of plant system operations. During emergency situations, this individual reports to the SM and performs communication and notification functions as assigned. The Communicator will keep an open line of communication with the NRC, as requested, and should not have any other event response duties that interfere with the communicator function once this open line is established. This position may be filled by the OS, AO, or STA from the previously described positions in Sections 3.1.2, 3.1.4, and 3.1.8, based on the event in progress.	<ul> <li>[CEP – B.1.a]</li> <li>G. Shift Communicator</li> <li>Note – Assigned as a collateral duty to an on-shift position other than the RPT or RPQI.</li> <li>NRC Notification and Communications</li> <li>ERO Notification</li> <li>State and Local Event Notification</li> <li>OSC Team Priorities, Dispatch and Control</li> </ul>	Non-RIE Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
209.	3.1.10 A Security Supervisor is available to perform state and local notifications. During emergency situations, the Security Supervisor reports to the Security Liaison in the TSC.	<ul> <li>[CEP – B.1.a]</li> <li>D. Security Shift Supervisor</li> <li>Organizational Interface and Coordination</li> <li>Use of Medical, Fire and Law Enforcement Support</li> <li>NRC Notification and Communications</li> <li>Site Assembly and Accountability</li> <li>Site Evacuation</li> </ul>	Non-RIE Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
210.	3.1.11 An individual qualified to perform initial dose assessment after an event, if required, until the function is transferred to the TSC or EOF. This may be filled by an AO as described in Section 3.1.4.	<ul> <li>[CEP – B.1.a]</li> <li>H. Shift Dose Assessor</li> <li>Note – Assigned as a collateral duty to any on-shift position.</li> <li>Effluent Release and Dose Assessment</li> </ul>	Non-RIE Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
211.	3.2 Technical Support Center (TSC) and Operations Support Center (OSC) Organizations The TSC & OSC Organizations are located on site and illustrated in Figure 5 3.	[CEP – Table B.1] Table establishes requirements for activation of ERO at Alert level.	Editorial No added, removed or altered commitments or change of intent.
212.	Upon activation of the TSC, the Emergency Coordinator will assume overall responsibility for the emergency response and for all onsite activities and personnel not directly related to plant operation. The Emergency Coordinator will coordinate activities involving the Control Room, TSC, OSC, and Security	<ul> <li>[CEP – B-1.a]</li> <li>Technical Support Center (TSC)</li> <li>A. Site Emergency Director</li> <li>Organizational Interface and Coordination</li> <li>Federal Assistance</li> </ul>	Non-RIE Title Changes Evacuation, or an assembly and subsequent evacuation at an Alert now optional. This is consistent with

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#	Current Emergency Plan	Con	mmon Emergency Plan and Site Annex	Change Type
	Building. Responsibility for classification, notification, protective action recommendations, assessment, and	•	Continuous Emergency Response Operations	NUREG 0654, R2 guidance.
	evaluation will be transferred from the SM. The	•	Command and Control	
	Emergency Classification Advisor (ECA) will assume	•	Facility/Group Management and Supervision	
	responsibility for assessment and evaluation of the	•	Contact and Use of External Support Services	
	plant condition. Onsite radiation surveys and	•	Integration of Offsite Agency Personnel in the ERF	
	monitoring will be conducted under the direction of			
	the Site Radiation Protection Coordinator (SRPC).		NRC Notification and Communications Event Classification	
	Offsite radiation surveys will be initiated as necessary	.	State and Local Event Notification	
	from the OSC under the coordination of the SRPC,		ERF Communications	
	until relieved by the EOF RP Manager. The Lead	.		
	OSC Supervisor will assume responsibilities for		Facility Activation Backup and Alternative Facilities	
	maintenance and repair coordination and search and		Accident Detection and Assessment	
	rescue. An evacuation, or an assembly and subsequent evacuation, shall be ordered upon the		OSC Team Priorities, Dispatch and Control	
	classification of an Alert or higher. Reference EP 6.0,		Site Assembly and Accountability	
	Emergency Measures, for additional details. TSC &		Site Evacuation	
	OSC ERO assignments, by title, responsibilities, and		ERO Radiological Protection	
	principle working relationships are listed in Appendix		Offsite Protective Action Recommendations	
	A.		Emergency Exposure	
			Event Termination	
			Recovery	
		B.	TSC Classification Advisor	
		•	Facility/Group Management and Supervision	
			Event Classification	
			State and Local Event Notification	
		•	ERF Communications	
		•	Facility Activation	
		•	Facility Operation	
		•	Accident Detection and Assessment	
		•	ERO Radiological Protection	
		•	Offsite Protective Action Recommendations	
		H.	TSC Radiation Protection Coordinator	
		•	Facility/Group Management and Supervision	
		•	Contact and Use of External Support Services	
		•	Event Classification	
		•	State and Local Event Notification	
		•	ERF Communications	
		•	Facility Activation	

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		Facility Operation	
		<ul> <li>Backup and Alternative Facilities</li> </ul>	
		<ul> <li>Accident Detection and Assessment</li> </ul>	
		<ul> <li>Effluent Release and Dose Assessment</li> </ul>	
		<ul> <li>OSC Team Priorities, Dispatch and Control</li> </ul>	
		Site Evacuation	
		<ul> <li>ERO Radiological Protection</li> </ul>	
		<ul> <li>Offsite Protective Action Recommendations</li> </ul>	
		Emergency Exposure	
		<ul> <li>Contamination Control Measures</li> </ul>	
		<ul> <li>Decontamination</li> </ul>	
		<ul> <li>Recovery</li> </ul>	
		<ol><li>Operations Support Center (OSC)</li></ol>	
		A. Lead OSC Supervisor	
		<ul> <li>Facility/Group Management and Supervision</li> </ul>	
		ERF Communications	
		Facility Activation	
		Facility Operation	
		Backup and Alternative Facilities	
		<ul> <li>OSC Team Priorities, Dispatch and Control</li> </ul>	
		Site Evacuation	
		ERO Radiological Protection	
		Radiation Protection Briefings	
		First Aid	
		Recovery	
		4. Emergency Operations Facility (EOF)	
		B. EOF Radiation Protection Coordinator	
		<ul> <li>Facility/Group Management and Supervision</li> </ul>	
		<ul> <li>Integration and Use of the Radiological</li> </ul>	
		Laboratory	
		<ul> <li>Facility Operation</li> </ul>	
		<ul> <li>Accident Detection and Assessment</li> </ul>	
		<ul> <li>Effluent Release and Dose Assessment</li> </ul>	
		<ul> <li>Radiological Monitoring Activities</li> </ul>	
		Offsite Protective Action Recommendations	
		<ul> <li>Radiation Protection Briefings</li> </ul>	
		Post-Accident Environmental Sampling	

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	3.3 Emergency Operations Facility (EOF) Organization The EOF Organization is located illustrated in Figure 5 4. The EOF is located in Green Bay.	[CEP – Table B.1] Table establishes requirements for activation of ERO at Alert level.	Editorial  No added, removed or altered commitments or change of intent.
214.	Upon activation of the EOF, the Emergency Director will assume overall responsibility for the emergency response and recovery.		Non-RIE EOF will no longer assume overall command and control, which will remain with the Site Emergency Director in the TSC
215.	Responsibility for offsite emergency response functions including dose assessment and recovery will be transferred from the EC. A liaison will be provided to state and local government agencies Emergency Operations Centers (EOCs) to assist in communications. EOF ERO assignments, by title, responsibilities, and principal working relationships are listed in EP Appendix A.	[CEP – B.1.a] The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):  2. Emergency Operations Facility (EOF) A. EOF Manager  • Dispatch and Control of Offsite EOC Liaisons	Non-RIE EOF ERO assignments, by title, responsibilities, and principal working relationships are listed in Section B.
216.	Additional actions may require extensive amounts of external resources. To ensure this, corporate headquarters may be contacted to provide or assist with offsite technical support.	[CEP – B.1.b] Remote Responders Assigned to the TSC (refer to Section B.1.a.2) The Reactor Engineer, Electrical/I&C Engineer, and Mechanical Engineer ERO minimum staff positions are remote responders assigned to the TSC.  NextEra provides a corporate facility that provides the equivalent resource capability as a backup for the remote ERO engineering positions.  [CEP – H.3] The EOF is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the EOF's primary functions include:  Coordinate corporate support.	Non-RIE The EOF will coordinate corporate support response.
217.	Other personnel also report to the TSC and EOF to assist in the emergency response operations. Additional personnel will provide logistic, administrative, and scheduling support. These personnel will ensure 24 hour continuity for minimum	[CEP – A.5]  NextEra maintains a depth to the ERO that is capable of providing continuous (24 hour/day) operation throughout a declared emergency by providing relief of the on-shift and augmenting ERO positions by	Editorial No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	staff positions.	qualified individuals. The shift rotation and ERO staffing for protracted ERO operations is designated by the Emergency Director.  The Emergency Director is the individual responsible for assuring continuity of resources (technical, administrative, and material) within the ERO.	
218.	3.4 Joint Information Center (JIC) The JIC will activate to provide periodic updates to the media and public. The JIC Organization is illustrated in Figure 5 5.	[CEP – Table B.1] Table establishes requirements for activation of ERO at Alert level.	Editorial No added, removed or altered commitments or change of intent.
219.	<ul> <li>4.0 OFFSITE EMERGENCY ORGANIZATION This section describes offsite supporting assistance available to the onsite staff emergency response organization.</li> <li>4.1 Corporate Support Most ERO positions are filled by personnel assigned to NextEra Energy Point Beach. The NextEra Energy Point Beach normal operations staffing, as shown in Figure 5 1 has available the technical and administrative support services of the corporate offices. The Emergency Director in the EOF will identify situations where additional assistance is needed and will relay the emergency assistance information to corporate management for evaluation. Corporate will provide or obtain assistance for the onsite emergency organization as required. These responsibilities include, but are not limited to:</li> <li>4.1.1 Providing senior company management support to the plant emergency organization.</li> <li>4.1.2 Providing funds necessary to implement the NextEra Energy Point Beach Emergency Plan.</li> <li>4.1.3 Providing contract security management direction and support for offsite facilities.</li> <li>4.1.4 Coordinating the restoration and/or operation of all generation, transmission, and distribution facilities.</li> <li>4.1.5 Monitoring reentry and/or recovery operations, post accident planning, and assisting as requested.</li> <li>4.1.6 Assisting with post accident investigation and review responsibilities.</li> </ul>	[CEP – B.1.b] The NextEra ERO includes remote response positions.  NextEra provides a corporate facility that provides the equivalent resource capability as a backup for the remote ERO engineering positions.  [CEP – G.2]  NextEra Corporate Communications and business unit personnel maintain programs and processes for the coordination and dissemination of information to the public and media using JIS concepts. Specifically, the process provides a structure and system for developing and delivering coordinated interagency messages; developing, recommending, and executing public information plans and strategies; advising decision makers concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.  Physical locations for interacting with the media are maintained at the corporate headquarters and locally near each site. Specific site locations are described in the site annexes Element H.5.  [CEP – H.3]  The EOF is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the EOF's primary functions include:	Non-RIE The EOF will coordinate corporate support response.

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	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
	<ul> <li>4.1.7 Providing general assistance for environmental monitoring.</li> <li>4.1.8 Providing Corporate Joint Information Center Support, including the Emergency Communications Team.</li> </ul>	• Coordinate corporate support.  [CEP – H.5]  NextEra provides space and equipment at their corporate facility to provide coordination of public information response activities with site and corporate JIS/JIC personnel.	
220.	4.2 Local Services Support During the operation of PBNP, it may become necessary to request and utilize assistance provided by local organizations and agencies. Since it is essential that support from these organizations and agencies be available, the following agreements and understandings have been made. (Letters of Agreement are referenced in Appendix D.)	[CEP – C.2.d] Local support organizations may be called to assist onsite for events requiring firefighting, medical, or law enforcement. Immediate assistance with firefighting, medical, and law enforcement at the sites is initiated using pre-established site specific communications systems.  Agreements have been formally developed and documented through memorandums of understanding (MOUs), contracts, and/or letters of agreement (LOAs).  Refer to Element A.4 for details on agreements.	Editorial  No added, removed or altered commitments or change of intent.
221.	Additionally, the PBNP Physical Security Plan ensures an agreement is in place with the Local Law Enforcement Agency (LLEA) that describes the external organizations that would respond to a hostile action based event. The specifics of this agreement are maintained by the PBNP Security Department.		Non-RIE Agreements with LLEAs continue to be controlled by the Security Plan
	4.2.1 Two Creeks Volunteer Fire Department When requested, the Two Creeks Volunteer Fire Department will provide fire fighting assistance at PBNP.	[PBN Annex – A.4] Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by PBN with the following organizations:  • Two Creeks Volunteer Fire Department	Editorial No added, removed or altered commitments or change of intent.
	4.2.2 Town of Two Creeks The Township of Two Creeks will make available to PBNP, the Two Creeks Town Hall to be used as required during an emergency at PBNP.	[PBN Annex – A.4] Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by PBN with the following organizations:  Town Of Two Creeks (Town Hall) [PBN Annex – J.2] Evacuated personnel may be required to assemble at the Two Creeks Town Hall or Two Rivers Fire Department depending on environmental conditions.	Editorial  No added, removed or altered commitments or change of intent.
224.	4.2.3 Aurora Medical Center Manitowoc County	[PBN Annex – L.2.b]	Editorial

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	The Aurora Medical Center Manitowoc County will provide medical assistance to NextEra Energy Point Beach personnel. The agreement provides for the treatment of personnel who suffer injuries complicated by radioactive contamination or radiation. Individuals may be transferred to the University Hospital and Clinics in Madison, Wisconsin, should the treatment required extend beyond the capabilities of the Aurora Medical Center Manitowoc County. The Aurora Medical Center Manitowoc County will maintain the capability and facilities to provide decontamination, first aid, and emergency stabilization medical treatment to injured personnel from NextEra Energy Point Beach. These services and facilities are available 24 hours a day.	The primary and backup offsite medical facilities to treat contaminated, injured personnel from PBN are: Primary – The Aurora Medical Center – Manitowoc County will provide medical assistance to PBN personnel. The Aurora Medical Center maintains a facility equipped to provide first aid, emergency medical stabilization treatment, and decontamination for ill or injured personnel from plant. It is available 24 hours a day, and is equipped with a sink, decontamination supplies, protective clothing, signs, and other necessary equipment.  Backup — University Hospital and Clinics in Madison, Wisconsin, may be utilized if the treatment required extend beyond the capabilities of the Aurora Medical Center. The University Hospital provides instruction and training on handling radiological accident patients.	No added, removed or altered commitments or change of intent.
225.	4.2.4 City of Two Rivers The City of Two Rivers will provide ambulance service to transport injured persons from NextEra Energy Point Beach. In addition, the Two Rivers Fire Department (TRFD) is available, if needed, for use as an alternative facility and an offsite assembly area for plant and support personnel.	[PBN Annex – L.4] The City of Two Rivers may provide backup ambulance service to transport injured persons from PBN. Each service has the means to control contamination while transporting victims.	Editorial  No added, removed or altered commitments or change of intent.
226.	4.2.5 University of Wisconsin Hospital and Clinics The University of Wisconsin Hospital and Clinics will accept and provide treatment to personnel with injuries beyond the capabilities of the Aurora Medical Center Manitowoc County, even if complicated by radioactive contamination. The University of Wisconsin Hospital and Clinics are available 24 hours a day for treatment or consultation.	[PBN Annex – L.2.b] The primary and backup offsite medical facilities to treat contaminated, injured personnel from PBN are: Backup – University Hospital and Clinics in Madison, Wisconsin, may be utilized if the treatment required extend beyond the capabilities of the Aurora Medical Center. The University Hospital provides instruction and training on handling radiological accident patients.	Editorial  No added, removed or altered commitments or change of intent.
227.	4.2.6 Aurora Health Care Manitowoc County At least two licensed physicians of the Aurora Health Care Affiliation in Manitowoc County, Wisconsin, will provide medical supervision and care for employees of NextEra Energy Point Beach who have medical conditions complicated by exposure to radiation. Both doctors have received training qualifying them to care	[PBN Annex – A.4] Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by PBN with the following organizations:  • Aurora Health Care – Manitowoc County (Physicians) [CEP – L.2.e]	Non-RIE Supplemented local doctors with expertise available from national lab.

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	for this type of patient. These affiliations consist of Aurora Medical Center Manitowoc County, Aurora Two Rivers Clinic, and Aurora Manitowoc Clinic.	The Radiation Emergency Assistance Center Training Site (REAC/TS) located at Oak Ridge, Tennessee, will respond to and/or provide advice and assistance to offsite medical facilities in the event of a severe radiation accident.	
228.	<ul> <li>4.2.7 Manitowoc County Sheriff's Department When alerted, the Manitowoc County Sheriff's Department will respond within 10 20 minutes and will:</li> <li>a. Assist in controlling traffic for the duration of the emergency.</li> <li>b. Assist the NextEra Energy Point Beach staff in keeping members of the general public from entering the PBNP exclusion area.</li> <li>c. Provide assistance in security related matters.</li> <li>d. Implement protective actions as directed by Manitowoc County Emergency Management</li> <li>e. Provide augmented notification capability.</li> <li>f. Provide for dispatch of ambulance services.</li> </ul>	[PBN Annex – A.4] Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by PBN with the following organizations:  • Manitowoc County Sheriff's Department	Non-RIE Agreement remains in place with Sheriff's Department. Previously listed items either normal department functions or coordinated through site security plan.
229.	4.2.8 Kewaunee Power Station Dominion Energy The Kewaunee Power Station (KPS) laboratory facility may provide limited assistance for radiological sample analysis during a radiological emergency at PBNP.	<ul> <li>[PBN Annex – A.4]</li> <li>Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by PBN with the following organizations:</li> <li>Dominion Energy Kewaunee Inc. and NextEra Energy Point Beach, LLC (Mutual Assistance)</li> </ul>	Editorial  No added, removed or altered commitments or change of intent.
230.	<ul> <li>4.2.9 Kewaunee County Sheriff's Department When alerted, the Kewaunee County Sheriff's Department will respond within 10 20 minutes, and will:</li> <li>a. Assist in controlling traffic for the duration of the emergency.</li> <li>b. Assist the NextEra Energy Point Beach staff in keeping members of the general public from entering the PBNP exclusion area.</li> <li>c. Provide assistance in security related matters.</li> <li>d. Implement protective actions as directed by Kewaunee County Emergency Management.</li> </ul>	[PBN Annex – A.4] Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by PBN with the following organizations:  • Kewaunee County Sheriff's Department	Non-RIE Agreement remains in place with Sheriff's Department. Previously listed items either normal department functions or coordinated through site security plan.
231.	4.2.10 Mishicot Area Ambulance Service Mishicot Area Ambulance Service will provide ambulance service to transport injured persons from	[PBN Annex – A.4] Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are	Editorial No added, removed or altered commitments or change of intent.

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	NextEra Energy Point Beach.	maintained by PBN with the following organizations:  • Mishicot Area Ambulance Service  [PBN Annex – L.4]  Mishicot Ambulance Service is the primary provider for the transportation of contaminated, injured individuals. The City of Two Rivers may provide backup ambulance service to transport injured persons from PBN. Each service have the means to control contamination while transporting victims.	
	4.2.11 National Weather Service The National Weather Service will provide backup meteorological data for PBNP should our instrumentation become inaccessible or inoperable.	[CEP – H.8] Meteorological Monitoring Weather forecasts and certain meteorological data is available from the National Weather Service.	Editorial  No added, removed or altered commitments or change of intent.
	4.2.12 Westinghouse Electric Corporation Upon request, Westinghouse will provide emergency technical assistance, including equipment and/or services, in support of PBNP in the unlikely event of an emergency.	[PBN Annex – A.4] Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by PBN with the following organizations:  • Westinghouse Electric Corporation [PBN Annex – B.5] 2. Other External Non-NextEra Support Organizations A. Westinghouse (the NSSS vendor for PBN): Upon request, Westinghouse will provide emergency technical assistance, including equipment and/or services, in support of PBN in the unlikely event of an emergency.	Editorial  No added, removed or altered commitments or change of intent.
	4.2.13 Institute of Nuclear Power Operations (INPO) In the event of an emergency, INPO will provide resources to assist in acquiring the help of other industry organizations.	[CEP – B.5]  1. Institute of Nuclear Power Operations (INPO) INPO has an emergency response plan that enables it to provide the assistance in locating sources of emergency personnel, equipment, and operational analysis.	Editorial  No added, removed or altered commitments or change of intent.
	4.2.14 Bechtel Power Corporation Upon request, Bechtel will provide technical assistance to PBNP.	[PBN Annex – B.5] 2. Other External Non-NextEra Support Organizations B. Bechtel Power Corporation (the architectengineer for PBN): Upon request, Bechtel will provide technical assistance to PBN.	Editorial  No added, removed or altered commitments or change of intent.
236.	5.0 COORDINATION WITH PARTICIPATING	[PBN Annex – A.1.a]	Editorial

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	AGENCIES	3. Offsite Response Organization (OROs)	Details of State Departments
	AGENCIES This section identifies the principal state agency (designated state authority) and other governmental agencies (local, state, and federal) having planning and/or implementation responsibilities for emergencies in the PBNP Emergency Planning Zone (EPZ). 5.1 State and Local Agencies 5.1.1 Wisconsin Department of Military Affairs, WEM The Administrator of WEM, Department of Military Affairs, has been designated by the Governor of the State of Wisconsin as the state officer to assume the primary responsibility and authority for radiological emergency response planning. WEM is to exercise principal supportive roles, in addition to other state agencies, whose involvement will be coordinated by WEM. WEM will brief the governor as to the situation and actions taken by the federal, state, and local agencies and activate the state Emergency Operating Center (EOC) in the Department of Military Affairs Office Building in Madison, if necessary.	The principle state agencies having planning and implementation responsibilities for emergencies for PBN are:  a. Wisconsin Department of Military Affairs, WEM  The Administrator of WEM, Department of Military Affairs, has been designated by the Governor of the State of Wisconsin as the state officer to assume the primary responsibility and authority for radiological emergency response planning.	Details of State Departments response are provided in the State Plan. No added, removed or altered commitments or change of intent.
237.	5.1.2 Wisconsin Department of Health Services, Radiation Protection Section (RPS) The Radiation Protection Section (RPS), Department of Health Services, under the Radiation Protection Act, WIS STATS 140.50 to 140.60, is responsible for preventing exposure to ionizing radiation in amounts which are detrimental to health according to nationally accepted standards. The state designates a State Radiological Coordinator (SRC) of the State Radiological Response Team for peacetime radiological emergencies. The SRC is experienced in the area of radiological health and is a staff member of the RPS. Team members are personnel of the Section as designated by the SRC, augmented by selected personnel from the WEM and other state agencies trained specifically for radiological incidents. They will do the following: conduct an initial survey to determine direct radiation levels and/or the severity and extent of the contaminated area, including soil,	[PBN Annex – A.1.a] b. Wisconsin Department of Health Services, Radiation Protection Section Is responsible for preventing exposure to ionizing radiation in amounts which are detrimental to health according to nationally accepted standards.	Editorial Details of State Departments response are provided in the State Plan. No added, removed or altered commitments or change of intent.

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	food and crop samples by taking readings and samples for analysis and making food chain dose estimates; advise how decontamination of the area should be accomplished; and assist in checking the evacuees of an involved area for contamination or exposure.		
238.	5.1.3 Wisconsin Department of Transportation, Division of State Patrol (SP) The Wisconsin State Patrol supports the Division of Highways and local law enforcement services directing vehicular and pedestrian movement out of and around the area of the incident, controlling access into the area and providing security at the site. Besides mobile radios in all Division of Enforcement and Inspection vehicles, the Office of Transportation Safety has a communication van which can serve as a forward command post at the site. Each district has a supply of walkie talkies on a dedicated frequency that is available through emergency police services for local and state emergency communications at the site of an incident. The SP is available for courier service, by motor vehicle, for taking the state radiological response team to the site, and delivering samples to the State Laboratory of Hygiene for analysis, if necessary, to expedite the response.	[PBN Annex – A.1.a] c. Wisconsin Department of Transportation, Division of State Patrol Is responsible for directing vehicular and pedestrian movement out of and around the area of the incident, controlling access into the area and providing security at the site.	Editorial Details of State Departments response are provided in the State Plan. No added, removed or altered commitments or change of intent.
239.	5.1.4 Wisconsin Department of Natural Resources, Division of Enforcement The conservation wardens of the Division of Enforcement, Wisconsin Department of Natural Resources, can support the local law enforcement services as does the SP. Selected department personnel receive training in ingestion sampling procedures. The wardens have mobile radios in their cars on the SP frequency. The department can provide courier service, by motor vehicles and plane, to take the State Radiological Response Team to the site if necessary to expedite the response.	[PBN Annex – A.1.a] d. Wisconsin Department of Natural Resources, Division of Enforcement Provides support to state and local law enforcement agencies and courier service if necessary.	Editorial Details of State Departments response are provided in the State Plan. No added, removed or altered commitments or change of intent.
240.	5.1.5 Wisconsin Department of Transportation, Division of Highways The Division of Highways, Wisconsin Department of Transportation, is responsible, when so ordered by	[PBN Annex – A.1.a] e. Wisconsin Department of Transportation, Division of Highways Is responsible, when so ordered by the Administrator	Editorial Details of State Departments response are provided in the State Plan.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	the Administrator of WEM, for implementing the Emergency Highway Traffic Regulation Plan when, as a result of a radiological incident, a large area is cordoned off by the law enforcement services and vehicular traffic is directed to other roads.	of WEM, for implementing the Emergency Highway Traffic Regulation Plan when, as a result of a radiological incident a large area is cordoned off by the law enforcement services and vehicular traffic is directed to other roads.	No added, removed or altered commitments or change of intent.
241.	5.1.6 Wisconsin Department of Agriculture, Trade and Consumer Protection Under the Hazardous Substances Act, 100.37, the Wisconsin Department of Agriculture can ban the sale of foods which have harmful levels of radioactivity. The Wisconsin Department of Agriculture can advise the use, sale, or disposal of animal feeds containing harmful levels of radioactive contamination. Selected department personnel receive training in ingestion sampling procedures. The department can gather samples of milk and crops to determine radionuclide and related stable element concentrations, and can advise dairies as to the disposition of milk, farmers as to the feeding of their cows, and growers as to restoring land to productivity. Arrangements can be made by the Wisconsin Department of Agriculture with respect to handling of animals exposed to radioactive contamination.	[PBN Annex – A.1.a] f. Wisconsin Department of Agriculture, Trade and Consumer Protection Selected department personnel receive training in ingestion sampling procedures. May ban the sale of foods which have harmful levels of radioactivity and advise on the use, sale, or disposal of animal feeds containing harmful levels of radioactive contamination.	Editorial Details of State Departments response are provided in the State Plan. No added, removed or altered commitments or change of intent.
242.	5.1.7 Wisconsin Department of Military Affairs Section 21.11 of the Wisconsin Statutes contains the authority for the governor to order all or any part of the Wisconsin National Guard personnel and/or equipment into active State service for public emergencies, disturbances or disasters. Because of the relatively short duration and reaction time needed in a radiological incident, the Wisconsin National Guard, under the Department of Military Affairs, will be involved in such incidents only if the size of the area involved requires their support. The Wisconsin National Guard could provide additional traffic control, communications, emergency provisions of food, radiological monitoring and decontamination services. The Wisconsin Army National Guard has helicopters available in Madison and West Bend. If so ordered by the governor, these can provide aerial reconnaissance and surveillance, insertion of	[PBN Annex – A.1.a] 3. Offsite Response Organization (OROs) The principle state agencies having planning and implementation responsibilities for emergencies for PBN are: a. Wisconsin Department of Military Affairs, WEM The Administrator of WEM, Department of Military Affairs, has been designated by the Governor of the State of Wisconsin as the state officer to assume the primary responsibility and authority for radiological emergency response planning.	Editorial Details of State Departments response are provided in the State Plan. No added, removed or altered commitments or change of intent.

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243.	personnel and equipment, aerial evacuation, aerial supply, illumination, communications, and command and control. The Wisconsin Air National Guard has fixed wing aircraft at Madison and Milwaukee and, if so ordered by the governor, could provide services similar to the helicopters with the exception of take off and landing capabilities and providing illumination. Additional radiation monitoring equipment maintained and operated by the Wisconsin Army National Guard is available at armories throughout the state. Nearly every one of the units has a 2 5 man team trained in chemical radiological procedures.  5.1.8 Manitowoc and Kewaunee County Manitowoc County Emergency Medical Services (EMS) – Emergency medical services, ambulances, and emergency medical personnel as requested by the PBNP Control Room to the Manitowoc County 911 operator and implemented using the incident command system structure.	[PBN Annex – L.4] Mishicot Ambulance Service is the primary provider for the transportation of contaminated, injured individuals. The City of Two Rivers may provide backup ambulance service to transport injured persons from PBN. Each service have the means to control contamination while transporting victims. [PBN Annex –F.2] PBN uses the 911 emergency dispatch system to call out medical support facilities. The 911 dispatcher communicates with fixed and mobile facilities as necessary to coordinate response.	Non-RIE Change of primary ambulance service. No added, removed or altered commitments or change of intent.
244.	Manitowoc County Fire and Rescue – Fire response, fire apparatus, and volunteer firemen as requested by the PBNP Control Room to the Manitowoc County 911 operator and implemented using the incident		Non-RIE Fire support controlled by the site's Fire Protection Program.
245.	command system structure.  Under the provisions of the Wisconsin Statutes 22.16 and the Manitowoc and Kewaunee County Emergency Government Ordinances, authorities of both counties have the responsibility and authority to coordinate offsite emergency activities in the event of a radiological incident. Each county has prepared a County Emergency Operations Plan to carry out this responsibility which is applicable to emergencies at PBNP. These plans are referenced in Appendices F and G.  Upon notification of an emergency at PBNP which		Non-RIE  Details on offsite emergency plans remain in County plans.  Removal from CEP results in no added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	requires participation of local or county agencies,		
	each county will activate its emergency organization.		
	Each emergency organization is under the direction		
	of the county board chairman and is composed of		
	representatives from various participating agencies		
	which include, but are not limited to, the county		
	sheriff, county emergency government director,		
	county highway commissioner, fire fighting		
	organizations, and school administrators. The		
	Manitowoc and Kewaunee County Emergency		
	Organization will provide or assist the emergency		
	response activities by the following:		
	a. Provide notification to county and support		
	agencies and local area residents that an incident has		
	occurred at PBNP, if necessary.		
	b. Provide liaison and communication capabilities		
	with the plant facility and appropriate federal, state		
	and local organizations.		
	c. Assist in providing release of accurate public		
	information concerning the offsite consequences		
	of the emergency through all available media. In		
	addition, advise and instruct area residents on		
	what protective actions should be taken.		
	d. Assist in providing for medical treatment, health		
	and sanitation services, and mass care for		
	members of the general public.		
	e. Assist in the evacuation of affected offsite		
	locations, if such an action should be required.		
246.	5.1.9 Local Water Supply Utilities		Non-RIE
	In the unlikely event that an accidental discharge of		IF release reaches level of a
	liquid radioactive material occurs into Lake Michigan		classifiable event notifications will
	which exceeds prescribed limits, notification that the		be made to State and Counties.
	event has occurred will be made to the municipal		Action may be required outside
	water utilities of Two Rivers, Manitowoc and Green		declaration of an emergency.
	Bay, as well as the State of Wisconsin Emergency		Controlled by OCDM.
	Management. These notifications will be made as		Controlled by Cobin.
	soon as possible, but no later than 12 hours after the		
	initial start of the release.		
247.	5.2 Federal Government	[CEP - E.1]	Editorial
	Should an emergency situation or accident occur at	3. NRC Event Notification	No added, removed or altered
	PBNP, notification, reports, or requests for assistance	NextEra will notify the NRC using ENS as soon as	commitments or change of intent.

**Current Emergency Plan Common Emergency Plan and Site Annex Change Type** may be made to various federal agencies and possible after notification of the OROs, and not later organizations. Details for notifying and making reports than 60 minutes after event declaration. to these agencies, as well as for requesting and obtaining assistance, are provided in the Emergency Plan Implementing Procedures (EPIPs). The following agencies may, as the situation warrants, require notification or reports, or provide assistance if required: 5.2.1 NRC Operations Headquarters, Rockville, **Editorial** 248. ICEP - E.11 Marvland No added, removed or altered NRC Event Notification The NRC requires notification as stated in Section 6.0 commitments or change of intent. NextEra will notify the NRC using ENS as soon as below. possible after notification of the OROs, and not later than 60 minutes after event declaration. NRC **Editorial** 5.2.2 249. [CEP - E.1] Region III Office **NRC Event Notification** No added, removed or altered NextEra will notify the NRC using ENS as soon as commitments or change of intent. possible after notification of the OROs, and not later than 60 minutes after event declaration. 5.2.3 Department of Energy (DOE) ICEP – A.1.al Non-RIE 250. The DOE in Region 5 has agreed to provide **Federal Organizations** Details on DOE removed. radiological assistance upon request. This request Control, responsibility and interface of federal Federal agency response can be made by the Wisconsin Emergency organizations is governed by the National Response addressed in National Response Management. The Radiological Assistance Team can Framework (NRF) and the Framework (NRF) and the Nuclear/Radiological be expected to respond within 6 hours as directed by Incident Annex to the NRF when they are called to Nuclear/Radiological Incident the Chicago Operations Office of DOE. respond to an event at a nuclear power plant. The Annex to the NRF NRC acts as the lead federal agency with regard to technical matters during a nuclear incident, including providing radiological assistance. **251**. 5.2.4 United States Coast Guard Non-RIE ICEP - A.1.al The U.S. Coast Guard can supply local weather **Federal Organizations** Details on Coast Guard removed. information, if necessary, Control, responsibility and interface of federal Federal agency response The U.S. Coast Guard, when requested by the organizations is governed by the National Response addressed in National Response cognizant state or local emergency response agency Framework (NRF) and the Nuclear/Radiological Framework (NRF) and the will make a marine broadcast and issue a Notice to Incident Annex to the NRF when they are called to Nuclear/Radiological Incident Mariners, warning all craft of the danger in the area. respond to an event at a nuclear power plant. The Annex to the NRF (Contents of the broadcast to be supplied by the NRC acts as the lead federal agency with regard to cognizant emergency response agency.) technical matters during a nuclear incident, including The U.S. Coast Guard, if requested by the Federal providing radiological assistance. Emergency Management Agency or its designated representative will consider additional assistance on a

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	case by case basis. The decision to commit Coast Guard resources will be made by the Commander, Ninth Coast Guard District.		
252.	6.0 NUCLEAR REGULATORY COMMISSION NOTIFICATION Telephone notification of the NRC Headquarters and NRC Region III shall be made as soon as possible, for a significant event as listed in 10 CFR 50.72. Notification of the NRC under this section does not necessarily mean the Emergency Plan has been implemented.	<ul> <li>[CEP – E-1]</li> <li>3. NRC Event Notification</li> <li>NextEra will notify the NRC using ENS as soon as possible after notification of the OROs, and not later than 60 minutes after event declaration.</li> <li>An accelerated call to the NRC will be made immediately after notification of local law enforcement agencies (LLEAs), or within about 15 minutes of the recognition of the security-based threat (discovery of an imminent threat or attack against the site), to ensure the NRC is notified of safeguards events. The information provided in the accelerated NRC notification will be limited to the following: <ul> <li>Site name.</li> <li>ECL if determined prior to the accelerated notification.</li> <li>Nature of the threat and the attack status.</li> </ul> </li> </ul>	Editorial  No added, removed or altered commitments or change of intent.
253.	7.0 METHODS OF NOTIFICATION 7.1 Notification of Offsite Agencies The methods used for notification of offsite agencies are described in the EPIPs. The EPIPs provide an established message authentication scheme for each emergency classification, guidance on assuring and verifying that each agency is notified, and an incident report form for each emergency classification. The incident report form provides message verification and information for the initial and follow up messages. The initial messages contain information about the location of the incident, name of caller, date/time of incident, class of emergency, whether a release is taking place potentially affected population and areas, and whether protective actions may be necessary. The follow up messages contain the basic information from the initial message with the following additional information if it is known and appropriate: the type and form of any actual or projected radiological release; meteorological conditions; estimate of	[CEP – E.1]  1. ERO Notification The Emergency Director will direct or perform notification of the ERO for all emergency classification levels. ERO personnel report to their assigned emergency response facilities as directed. In the event of a security threat, personnel may be instructed to respond to alternative facilities, or seek cover if on-site. The means for alerting and notifying ERO members are described in Element F.1.c. 2. ORO Event Notification NextEra, in cooperation with the OROs, has established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes are made to PARs, a notification to the OROs is made within 15 minutes. Receipt location of notification messages is site specific. ORO notification locations are described in	Non-RIE Specific items to be included in follow-up messages removed. Content of Follow up message now established with offsite agencies.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	quantity of radioactive material released or being	the site annexes.	
	released; actual or projected doses in the affected	3. NRC Event Notification	
	sector(s); surface contamination measurements;	NextEra will notify the NRC using ENS as soon as	
	emergency response actions in progress;	possible after notification of the OROs, and not later	
	recommended emergency actions, including	than 60 minutes after event declaration.	
	protective measures; request for any needed onsite	An accelerated call to the NRC will be made	
	support by offsite organizations; and prognosis for	immediately after notification of local law enforcement	
	worsening or termination of the emergency.	agencies (LLEAs), or within about 15 minutes of the	
		recognition of the security-based threat (discovery of	
		an imminent threat or attack against the site), to	
		ensure the NRC is notified of safeguards events. The	
		information provided in the accelerated NRC	
		notification will be limited to the following:	
		Site name.	
		ECL if determined prior to the accelerated	
		notification.	
		Nature of the threat and the attack status.	
		[CEP - E.1.a]	
		1-	
		12	
		The site's name	
		Time of event	
		, ,	
		<b>y</b> .	
254	State and County Emergency Management agencies	•	Editorial
254.		1-	
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254.	State and County Emergency Management agencies shall be notified of any of the four emergency classes within 15 minutes of the event classification. Figure 5	Notifications to OROs include a means of verification or authentication within the automated system or by providing call back verification phone numbers.  [CEP – E.3]  NextEra sites and OROs have established the content of the initial notification message to be used during an emergency. Minimum content of the initial notification will include the following:  The site's name  Time of event  The ECL  Protective Action Recommendation (PAR)  Whether a release is taking place In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding event conditions and response actions.  [CEP – E-1]  ORO Event Notification  NextEra, in cooperation with the OROs, has	Editorial  No added, removed or altered commitments or change of intent

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	of offsite agencies during emergencies. Communications capabilities are discussed in EP 7.0, Emergency Facilities and Equipment, of this Emergency Plan.	established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes are made to PARs, a notification to the OROs is made within 15 minutes.  Receipt location of notification messages is site specific. ORO notification locations are described in the site annexes.	
255.	The general public will be notified through normal methods including press releases and news conferences of the lesser emergency classifications where protective actions are not required of the general public. In emergencies which may require some protective actions to be taken by the general public, notification will be accomplished by the Manitowoc County Joint Dispatch Center and Kewaunee County Sheriff's Department and the State of Wisconsin Emergency Management. The primary method of notifying residents in the affected area is by the Integrated Public Alert and Warning System (IPAWS) as described in EP 7.0, Section 10.0. Backup Alert and Notification System (ANS) for this EPZ is achieved through Route Alerting, which is contained within the Radiological Emergency Response Plans and procedures for the State of Wisconsin and the Counties Manitowoc and Kewaunee. These plans and procedures have been approved by the Federal Emergency Management Agency (FEMA) in accordance with Title 44 of the Code of Federal Regulations (CFR) §§350.12 and 14. Backup means of notification include police and emergency vehicles driving in the area with high power or "yelp" sirens on, mobile public address systems, and door to door personal contact. This backup notification procedure will commence with the population within the area of greatest risk and continue with the balance of the population within the EPZ as required. The actual notification and protective action message will be transmitted over local Emergency Alerting System.	[CEP – E.2] Detailed ANS information is maintained in the ANS design report for each site as listed in the site annexes.  [PBN Annex – E.2] Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-PBN-115, PBN Alert and Notification System Design Report.  Manitowoc County is responsible for activation of IPAWS and ensuring the operability of the system.  [CEP – E.5] ORO procedures provide for initial and follow-up messages to the public including instructions for protective actions, if required. NextEra will assist with establishment appropriate instructions and message content when requested by the ORO.	Non-RIE Details on ANS provided in FEMA approved Design Report.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
256.	Table 5.1, Minimum Staffing for Emergencies	[CEP – B.3] Table B-1: On-Shift and Augmenting ERO Staffing Plan	Non-RIE Evaluation of the CEP ERO detailed in Analysis 1 and Analysis 2.
257.	Figure 5-1, Organization – Normal Operations		Non-RIE Figure removed No added, removed or altered commitments or change of intent.
258.	Figure 5-2, On-Shift Emergency Organization		Non-RIE Figure removed, ERO described in Section B of CEP. No added, removed or altered commitments or change of intent.
259.	Figure 5-3, TSC and OSC		Non-RIE Figure removed, ERO described in Section B of CEP. No added, removed or altered commitments or change of intent.
260.	Figure 5.4, EOF		Non-RIE Figure removed, ERO described in Section B of CEP. No added, removed or altered commitments or change of intent.
261.	Figure 5.5, JIC		Non-RIE Figure removed, ERO described in Section B of CEP. No added, removed or altered commitments or change of intent.
262.	Figure 5.6, Emergency Notification Sequence		Non-RIE Figure removed, notifications described in body of plan. No added, removed or altered commitments or change of intent.
263.	Figure 5.7, Offsite Notifications		Non-RIE Figure removed, notifications described in body of plan. No added, removed or altered commitments or change of intent.

**Current Emergency Plan Common Emergency Plan and Site Annex Change Type** EP 6.0, Emergency Measures, R67 DISCUSSION 1.0 264. Non-RIE Emergency measures begin with the identification Removed wording contained no and classification of an emergency and the activation additional commitments. of the appropriate emergency organization. Activation of the emergency response organization is outlined in EP 5.0. Emergencies are arranged into four distinct classifications. Descriptions for each classification and initial protective actions are outlined in EP 4.0. Criteria for classifying emergency situations and examples of emergencies in each classification are described in the EPIPs. The details of the initial corrective and protective emergency measures are contained in the EPIPs. 2.0 ASSESSMENT ACTIONS **Editorial** 265. [CEP - B] 2.1 Responsibility for Assessment Several ERO positions have the following No added, removed or altered Effective coordination and direction of all elements of commitments or change of intent. responsibility: the emergency organization require continuing Accident Detection and Assessment assessment throughout the emergency. Types of Assessment Actions 2.2 266. Non-RIE The different types of assessment actions are All of the types of assessments described in Table 6 1. The details of the assessment actions provided for in current plan function are incorporated in the EPIPs for each Table 6-1 are assigned in the CEP. emergency classification. Continued assessment will No added, removed or altered be performed as required, with updating of offsite commitments or change of intent. response agencies. In addition, the results may require additional notifications, emergency actions, or reclassification of the accident. Table 6-1. Action Surveillance of Control Room Instrumentation In plant Radiological Surveys Offsite Consequence Assessment **Environmental Monitoring 267.** 2.3 Methods of Assessment [CEP - H.7] **Editorial** Accidents involving releases of radioactive materials No added, removed or altered NextEra sites have installed instrumentation for to the environment require special methods of commitments or change of intent. seismic monitoring, radiation monitoring, hydrologic assessment to ensure that responses are appropriate monitoring, meteorological monitoring, and fire/ toxic for the protection of the population at risk as well as gas/combustion products detectors in accordance plant personnel. with site Current Licensing Basis (CLB) documents. The plant has an extensive system for monitoring 1. Meteorological Monitoring radioactive materials released to the environment

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(e.g., liquid process, containment purge exhaust and auxiliary building ventilation exhaust, air ejector vent monitors). As a general requirement, the various process monitors are capable of initiating appropriate alarms or actuating control equipment to provide containment of radioactive materials if pre established Room, TSC, and EOF. Refer to Chapter 2 of the limits are reached. These systems will allow for monitoring releases of radioactivity during accident conditions. In any accident condition where releases are not monitored or able to be monitored. EPIPs provide the basis for calculating theoretical worst case release rates corresponding to a design basis accident described in the NextEra Energy Point Beach FSAR.

## **Common Emergency Plan and Site Annex**

Each NextEra site has a permanent on site meteorological monitoring station for the acquisition and recording of wind speed, wind direction, and stability class for use in offsite dose projection. Meteorological information is displayed in the Control UFSARs for descriptions of the meteorological monitoring systems.

**Change Type** 

2. Hydrologic Monitoring

Each NextEra site has hydrological monitors that support the acquisition of data used for event recognition and declaration. Refer to Chapter 2 of the UFSARs for descriptions of the hydrologic monitoring systems.

3. Seismic Monitoring

Each NextEra site has a seismic monitoring system that supports the acquisition of data used for event recognition and declaration. Refer to Chapter 3 of the UFSARs for descriptions of the seismic monitoring system.

- Process and Area Radiation Monitors Process Radiation Monitors (PRMs) measure radioactive noble gas, iodine, and particulate concentrations in gaseous effluent pathways and gross radioactivity in other gaseous and fluid streams, and are used for event recognition and declaration. Area Radiation Monitors (ARMs) measure in-plant dose rates and allow in-plant dose rate determinations to be made remotely. This information may be used to aid in the determination of plant area accessibility for the protective action function. Refer to Chapters 11 and 12 of the UFSARs for descriptions of the PRM and ARM systems.
- Portable Radiation Monitors Portable radiation monitoring equipment is available for uses such as area monitoring, sampling, personnel surveys, and continued accident assessment.
- Sampling Systems Liquid and gaseous sampling systems, consisting of

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		normal sampling systems and panels located	
		throughout the unit(s) at each site, are used for event	
		recognition and declaration. Refer to Chapter 9 of the	
		UFSARs for descriptions the sites sampling systems.	
		7. Fire Detection Systems	
		The fire detection system, consisting primarily of	
		fire/smoke detectors, control panel units, and	
		annunciator panels, are used for event recognition	
		and declaration. The fire detection equipment, alarms, and suppression equipment are described in	
		detail in UFSAR Section 9.5 and in the sites' Fire	
		Hazard Analysis Report.	
		[CEP – I.1.b]	
		NextEra uses site specific versions of the Unified	
		RASCAL Interface (URI) off-site dose projection	
		computer model. The underlying dose assessment	
		model in URI is the NRC RASCAL 4 model, based on	
		the methods and equations documented in NUREG-	
		1940.	
		The URI model provides off-site radiological dose and	
		dose rate estimates based on near real time or	
		hypothetical inputs. Projected dose is based on EPA-	
		400-R92-001 dose conversion factors and provided	
		as; (1) the total effective dose equivalent, or TEDE (the sum of the effective dose equivalent from	
		immersion, 4 days of ground deposition, and the	
		committed effective dose equivalent from inhalation),	
		and (2) the committed dose equivalent to the thyroid	
		(CDE thyroid).	
		URI dose projection results are given for various	
		locations from the site boundary to 10 miles. URI is	
		capable of providing dose assessment results for	
		multiple release points from the site.	
268.	In addition, the site has a permanent meteorological	[CEP – H.7]	Editorial
	installation so that wind speed and direction, standard	1. Meteorological Monitoring	No added, removed or altered
	deviation of wind direction as well as change of	Each NextEra site has a permanent on site	commitments or change of intent.
	temperature with height, are recorded continuously in	meteorological monitoring station for the acquisition	
	the Control Room. Wind speed, direction, and standard deviation of wind direction are also available	and recording of wind speed, wind direction, and	
	from a backup tower on site and from an inland tower	stability class for use in offsite dose projection.	
	morn a backup tower on site and norm an iniand tower	Meteorological information is displayed in the Control	

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	located several miles west of NextEra Energy Point Beach. The inland tower is used to identify lake effect winds. In the event the above instrumentation is inaccessible or non functional, such information can be obtained from the local Coast Guard Station, or the National Weather Service in Green Bay.	Room, TSC, and EOF. Refer to Chapter 2 of the UFSARs for descriptions of the meteorological monitoring systems.	
269.	Upon determination of any emergency or potential emergency condition anticipated to have significant offsite dose consequences, appropriate EPIPs are initiated to project doses. The Emergency Coordinator in the TSC and Emergency Director in the EOF are responsible for ensuring that the appropriate EPIPs are performed. Airborne radioactivity concentration levels will be verified by offsite field monitoring teams deployed with portable radiological measurement and communications equipment. This information will aid state and county authorities in evaluating emergency action responses.	[CEP – I.1.b]  NextEra uses site specific versions of the Unified RASCAL Interface (URI) off-site dose projection computer model. The underlying dose assessment model in URI is the NRC RASCAL 4 model, based on the methods and equations documented in NUREG-1940.  [CEP-I.8]  NextEra field monitoring teams will track the plume from any radiological release by monitoring radiation levels and by obtaining and analyzing air samples. Field monitoring team environmental survey and air sample results are compared with dose assessment results to validate or adjust projections. Additionally, field monitoring results can be input into the dose assessment model to develop projections at different locations.	Editorial  No added, removed or altered commitments or change of intent.
270.	Plant procedures contain steps to take corrective actions in order to avoid or mitigate serious consequences. Operator training is a vital factor in ensuring that corrective actions are taken in an expeditious manner. Instrumentation, plant parameter system monitors, and the radiation monitoring system provide indications used by the operators to regulate systems necessary for the safe and proper operation of the plant.  Plant system indicators provide the operator with the information and controls needed to start up, operate at power, and shut down the plant. The system indicators and controls also provide the information and means needed to cope with abnormal operating conditions should they occur. Control of systems and display of information from these various systems are centralized in the Control Room. This instrumentation		Non-RIE Removed wording describing normal plant systems and procedures. No removed or altered commitments or change of intent.

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	provides a basis for initiation of corrective actions.		
271.	When necessary, the following additional corrective actions can be implemented during emergency situations:  3.1 Fire Fighting  Detailed procedures for responding to fire situations are defined in the NextEra Energy Point Beach Fire Protection Manual. The Fire Protection Manual contains instructions on fire protection and fire fighting along with specifying the fire protection organization and individual responsibilities. If outside assistance is needed, the Two Creeks Fire Department is called in to assist in extinguishing the fire.		Non-RIE Firefighting procedures are controlled by the site Fire Protection Program
272.	3.2 Damage Control and Repair For minor emergencies, the plant personnel will normally be able to handle the cleanup, repair, and damage control. For major emergencies, the support of other company personnel or specialized outside contractors may be required to assist in the damage control, cleanup, and repair operation. Emergency response operations will be handled with the assistance of agencies available for that purpose.		Non-RIE Removed wording describing normal plant processes. No removed or altered commitments or change of intent.
273.	Personnel exposure to radiation and radioactive materials during corrective actions should be controlled as stipulated in EP 6.0, Section 5.1.	[CEP – K.1.a] Onsite exposure guidelines for emergency workers, consistent with EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, U.S. Environmental Protection Agency, May 1992, Table 2-2, "Guidance on Dose Limits for Workers Performing Emergency Services," [CEP – K.1.b] Emergency worker exposure is monitored at the time of exposure by the use of electronic dosimeters. If direct measurement of airborne concentrations is not available at time of exposure, workers will be provided respiratory protection, when feasible, and total exposures will be calculated after the fact using follow up survey data and whole body counting equipment.	Editorial  No added, removed or altered commitments or change of intent.

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274.	4.0 PROTECTIVE ACTIONS	[CEP – J.1]	Editorial
	The EPIP used in classifying emergencies has	NextEra maintains procedures to provide for a range	No added, removed or altered
	predetermined EALs that, when met or exceeded, will	of protective actions for all areas controlled by the	commitments or change of intent.
	require protective actions to be taken. In addition, the	site. Protective actions have been developed for	
	Shift Manager may initiate EPIPs when they are	radiological incidents and to protect personnel during	
	determined to be necessary. EPIPs include	hostile actions directed at the site.	
	assessment actions, corrective actions, and	Sitewide notifications and announcements are	
	protective actions as appropriate.  Protective actions will ensure that personnel, both on	routinely made using the Public Address (PA) system.	
	and offsite, will be notified and actions initiated for	Personnel on site are notified of a declared	
	their protection in the event radiation or airborne	emergency through the PA system.	
	activity levels from a radiological emergency onsite	Visitors within the Protected Area are escorted by	
	exceed or are predicted to exceed predetermined	badged individuals. The escort is responsible for	
	values, or when other situations threaten personnel	controlling and directing their assigned visitors	
	safety.	regarding actions required by any announcements	
		and alarms.	
		Security personnel are used, as available, to augment PA announcements and to check OCA areas for	
		remaining individuals.	
		[CEP – J.1.a]	
		1-	
		Site evacuation is required following a Site Area Emergency or General Emergency unless delayed	
		due to safety issues. The sounding of an alarm over	
		the public address system occurs for the initiation of	
		site evacuation.	
		When a site evacuation occurs, ERO and other	
		essential personnel respond to their designated	
		response facilities/areas. Non-essential personnel	
		inside the Protected Area typically exit to the OCA by	
		following normal RP and Security processes and	
		proceed to a designated assembly area. Further	
		evacuation of non-essential personnel inside the OCA	
		occurs as warranted for the particular site.	
		A process is in place to perform a rapid evacuation of	
		the Protected Area without onsite monitoring and	
		OCA assembly if conditions warrant. Monitoring in	
		this instance is performed at an offsite location.	
275.	Protective actions taken within the exclusion and	[CEP – J.1]	Editorial
	protected area (onsite) are the responsibility of the	NextEra maintains procedures to provide for a range	No added, removed or altered
	SM and Emergency Coordinator with input from the	of protective actions for all areas controlled by the	commitments or change of intent.
	Emergency Classification Advisor, while those taken	site. Protective actions have been developed for	

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	offsite fall under the jurisdiction of Manitowoc and Kewaunee County Emergency Management Agencies with support from Wisconsin Emergency Management with the resources of the Department of Health Services, Radiation Protection Unit. It is recognized that at the beginning of an emergency evolution, the Shift Manager will have the responsibility and authority of the Emergency Coordinator until relieved. Recommendations of protective actions to be taken offsite will be made by the Shift Manager/Emergency Coordinator.	radiological incidents and to protect personnel during hostile actions directed at the site.  Sitewide notifications and announcements are routinely made using the Public Address (PA) system. Personnel on site are notified of a declared emergency through the PA system.  Visitors within the Protected Area are escorted by badged individuals. The escort is responsible for controlling and directing their assigned visitors regarding actions required by any announcements and alarms.  Security personnel are used, as available, to augment PA announcements and to check OCA areas for remaining individuals.  [CEP – J.4]  The emergency alarm, together with the public address system, is used to alert and notify on-site personnel of the need for assembly at a Site Area or General Emergency classification level (or earlier at the discretion of the Emergency Director).	
276.	Operations Department Abnormal Operating procedures (AOPs) contain specific instructions for the notification of protective actions for onsite personnel during hostile action based events.		Non-RIE  AOP actions continue to be controlled by operations requirements outside of the Emergency Plan  No removed or altered commitments or change of intent.
277.	4.1 Protective Actions, Evacuation, and Personnel Accountability This subsection provides for the timely relocation of individuals to prevent or minimize exposure to direct or airborne radiation or toxic/flammable gas intrusion. 4.1.1 Exclusion Area a. Action Criteria Protective actions for personnel onsite shall be taken when a radiological emergency has occurred, or may occur, which will result in concentrations of airborne activity or radiation levels that exceed normal limits for a specific area or areas and cannot be readily controlled. In addition, protective actions shall be		Non-RIE Removed wording for actions taken outside of declared events. Plant procedures address protective actions for various hazards (fire, toxic gases, flooding etc.) These actions would be taken whether an Emergency is classified or not. No removed or altered commitments or change of intent.

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	taken for onsite personnel in such situations as		
	toxic/flammable gas intrusion, fire, meteorological		
	danger, etc., where personnel safety is threatened.		
278.	b. Notification Time for Onsite Personnel	[CEP – J.4]	Non-RIE
210.	The actuation of fire alarms, radiation alarms, plant evacuation alarm, telephone calls, paging system, and public address announcements, as applicable, will alert onsite personnel to hazardous conditions and to actions they must take. These actions may be to assemble, to report to Emergency Response Facilities, to evacuate specific areas within the plant, or to evacuate the plant. Table 6 2 describes the assembly areas for onsite personnel (which could include plant personnel, contractor personnel, and visitors) to protect them from direct radiation or airborne radioactivity or toxic/flammable gas hazards according to evacuation classification the best estimate for initial notification of onsite personnel would be a minimum of 10 minutes, depending on instrumentation response and assessment capability at the time of the incident. It is important to note that most credible accidents in a nuclear power plant develop slowly and "defense in depth" concepts delay	The emergency alarm, together with the public address system, is used to alert and notify on-site personnel of the need for assembly at a Site Area or General Emergency classification level (or earlier at the discretion of the Emergency Director).	Removed wording for actions taken outside of declared events.  Plant procedures address protective actions for various hazards (fire, toxic gases, flooding etc.) These actions would be taken whether an Emergency is classified or not.  No removed or altered commitments or change of intent.
	the release of significant amounts of radioactivity.		
279.	c. Security Access Control The security program at NextEra Energy Point Beach is designed to deter, detect, and delay an intruder. The plant protected area is enclosed by a security fence. Plant personnel reporting to the plant during an emergency will enter via the SBCC. Security personnel will control access, log incoming personnel, and provide assistance, as required or requested. In the event these areas are uninhabitable, security control will be performed at an alternate location. Provisions to restrict access to areas of the site outside the fenced protected area shall be accomplished under the direction of the Security Supervisor. The Security Supervisor will assign a security force to control access to the plant property by barricading and staffing the site roads with appropriate placement of lights, chains, traffic cones,		Non RIE Removed wording on security action. Plant security procedures are found in the Point Beach Security Plan. No removed or altered commitments or change of intent.

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	padlocks, and gates. Access control shall be		
	performed with the aid and cooperation of the		
	Manitowoc County Sheriff's Department, as well as		
	assistance from the Wisconsin State Patrol.		
	Plant security procedures are found in the NextEra		
	Energy Point Beach Security Plan.		
280.	d. Assembly and Evacuation	[CEP – J.1]	Editorial
	Personnel assembly, and evacuation at NextEra	NextEra maintains procedures to provide for a range	No added, removed or altered
	Energy Point Beach will depend on the nature of the	of protective actions for all areas controlled by the	commitments or change of intent.
	emergency and the extent of the area affected. The	site. Protective actions have been developed for	
	Shift Manager, or the Emergency Coordinator if the	radiological incidents and to protect personnel during	
	TSC is activated, shall initiate any limited evacuation	hostile actions directed at the site.	
	or full site assembly, and/or evacuations. These	[CEP – J.4]	
	protective actions shall be made after careful	The emergency alarm, together with the public	
	consideration of the benefits and risks involved. The	address system, is used to alert and notify on-site	
	details of these protective actions are included in the	personnel of the need for assembly at a Site Area or	
	EPIPs.	General Emergency classification level (or earlier at	
	In general, these protective actions shall be in	the discretion of the Emergency Director).	
	accordance with the following:		
	1. A limited evacuation (withdrawal of personnel		
	from affected portion(s) of the plant) shall be		
	considered when any of the following conditions		
	exist:		
	(a) Unscheduled area radiation monitor high level		
	alarm.		
	(b) Conditions which indicate a valid containment		
	high flux at shutdown alarm is necessary.  (c) Unevaluated airborne radioactive concentrations		
	(c) Unevaluated airborne radioactive concentrations in excess of the derived air concentrations		
	(DACs) specified in Appendix B to 10 CFR 20.		
	(d) Excessive radioactive surface contamination		
	levels.		
	(e) Other emergency conditions, such as fire, or		
	toxic/flammable gas intrusion that may		
	endanger human life or health. The criteria for		
	these radiation levels, alarms and conditions do		
	not apply to anticipated increases or alarms		
	resulting from planned operations.		
	When a limited evacuation is ordered, personnel in		
	the room, area, or building will proceed as directed. If		
	evacuation is from areas within the RCA, personnel		
<u></u>	evacuation is from areas within the KCA, personner		

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	will proceed to the RP station for accountability and contamination monitoring.  If a hazard continues to increase in severity or spreads to other areas, and the Shift Manager or Emergency Coordinator deems it necessary, an evacuation or an assembly and subsequent evacuation may also be ordered.		
281.	An evacuation, or an assembly and subsequent evacuation shall be ordered upon the classification of an Alert or higher.	[CEP – J.1.a] Site evacuation is required following a Site Area Emergency or General Emergency unless delayed due to safety issues. The sounding of an alarm over the public address system occurs for the initiation of site evacuation.	Non-RIE Align requirement to evacuate non- essential personnel with 0654, R.2 Changed time evacuation required from Alert to SAE. CEP still maintains the capability to conduct assembly and evacuation at the Alert ECL at the direction of the Shift Manager or the Site Emergency Director.
282.	<ul> <li>3. An Exclusion Area assembly or an assembly and subsequent evacuation shall be considered when:</li> <li>(a) The conditions of a limited evacuation continue to increase in severity or spread to other areas.</li> <li>(b) The general area radiation levels outside of the Radiation Control Area exceed prescribed limits.</li> </ul>	[CEP – J.1]  NextEra maintains procedures to provide for a range of protective actions for all areas controlled by the site. Protective actions have been developed for radiological incidents and to protect personnel during hostile actions directed at the site.  Sitewide notifications and announcements are routinely made using the Public Address (PA) system. Personnel on site are notified of a declared emergency through the PA system.  Visitors within the Protected Area are escorted by badged individuals. The escort is responsible for controlling and directing their assigned visitors regarding actions required by any announcements and alarms.  Security personnel are used, as available, to augment PA announcements and to check OCA areas for remaining individuals.  [CEP – J.1.a]  Site evacuation is required following a Site Area Emergency or General Emergency unless delayed due to safety issues. The sounding of an alarm over the public address system occurs for the initiation of	Editorial  No added, removed or altered commitments or change of intent.

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		site evacuation.  When a site evacuation occurs, ERO and other essential personnel respond to their designated response facilities/areas. Non-essential personnel inside the Protected Area typically exit to the OCA by following normal RP and Security processes and proceed to a designated assembly area. Further evacuation of non-essential personnel inside the OCA occurs as warranted for the particular site.  A process is in place to perform a rapid evacuation of the Protected Area without onsite monitoring and OCA assembly if conditions warrant. Monitoring in this instance is performed at an offsite location.	
283.	<ul> <li>4. When an Exclusion Area assembly or an assembly and subsequent evacuation is ordered, personnel shall proceed as listed below (Reference Table 6 2):</li> <li>(a) Public visitors on the beach and Energy Center will proceed to the SBCC Security Checkpoint, to receive further direction.</li> <li>(b) Duty Shift Operations personnel will report immediately to the Control Room and remain there unless instructed otherwise.</li> <li>(c) Personnel with assigned emergency duties shall proceed to their preassigned emergency response facility or designated assembly area.</li> <li>(d) All personnel who do not have an emergency assignment shall proceed to the nearest designated assembly areas listed in Table 6 2 unless directed otherwise.</li> </ul>	[CEP – J.1]  NextEra maintains procedures to provide for a range of protective actions for all areas controlled by the site. Protective actions have been developed for radiological incidents and to protect personnel during hostile actions directed at the site.  Sitewide notifications and announcements are routinely made using the Public Address (PA) system. Personnel on site are notified of a declared emergency through the PA system.  Visitors within the Protected Area are escorted by badged individuals. The escort is responsible for controlling and directing their assigned visitors regarding actions required by any announcements and alarms.  Security personnel are used, as available, to augment PA announcements and to check OCA areas for remaining individuals.  [CEP – J.1.a]  Site evacuation is required following a Site Area	Editorial  No added, removed or altered commitments or change of intent.
		Emergency or General Emergency unless delayed due to safety issues. The sounding of an alarm over the public address system occurs for the initiation of site evacuation.  When a site evacuation occurs, ERO and other essential personnel respond to their designated response facilities/areas. Non-essential personnel	

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		inside the Protected Area typically exit to the OCA by following normal RP and Security processes and proceed to a designated assembly area. Further evacuation of non-essential personnel inside the OCA occurs as warranted for the particular site.  A process is in place to perform a rapid evacuation of the Protected Area without onsite monitoring and OCA assembly if conditions warrant. Monitoring in this instance is performed at an offsite location.	
284.	<ul> <li>5. When an Exclusion Area evacuation is ordered, personnel shall proceed as listed below (Reference Table 6 2):</li> <li>(a) Public visitors on the beach and Energy Center will proceed to the SBCC Security Checkpoint, to receive further direction.</li> <li>(b) Duty Shift Operations personnel will report immediately to the Control Room and remain there unless instructed otherwise.</li> <li>(c) Personnel with assigned emergency duties shall proceed to their preassigned emergency response facility or designated assembly area.</li> <li>(d) All other personnel shall proceed to the Security Checkpoint at SBCC to be released.</li> </ul>	[CEP – J.1] NextEra maintains procedures to provide for a range of protective actions for all areas controlled by the site. Protective actions have been developed for radiological incidents and to protect personnel during hostile actions directed at the site.  Sitewide notifications and announcements are routinely made using the Public Address (PA) system. Personnel on site are notified of a declared emergency through the PA system.  Visitors within the Protected Area are escorted by badged individuals. The escort is responsible for controlling and directing their assigned visitors regarding actions required by any announcements and alarms.  Security personnel are used, as available, to augment PA announcements and to check OCA areas for remaining individuals.  [CEP – J.1.a]  Site evacuation is required following a Site Area Emergency or General Emergency unless delayed due to safety issues. The sounding of an alarm over the public address system occurs for the initiation of site evacuation.  When a site evacuation occurs, ERO and other essential personnel respond to their designated response facilities/areas. Non-essential personnel inside the Protected Area typically exit to the OCA by following normal RP and Security processes and proceed to a designated assembly area. Further evacuation of non-essential personnel inside the OCA	Editorial No added, removed or altered commitments or change of intent.

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		occurs as warranted for the particular site. A process is in place to perform a rapid evacuation of the Protected Area without onsite monitoring and OCA assembly if conditions warrant. Monitoring in this instance is performed at an offsite location.	
285.	6. At the discretion of the Emergency Coordinator, the assembled non ERO personnel may be evacuated from the site when chemical, radiological, or meteorological conditions allow, or if conditions warrant, take additional actions, such as radiological monitoring and relocation.	[CEP – B.1.a] The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions  1. Control Room (CR) A. Shift Manager  • Site Assembly and Accountability  • Site Evacuation  2. Technical Support Center (TSC) A. Site Emergency Director  • Site Assembly and Accountability  • Site Evacuation	Non-RIE Individual with overall command and control is responsible for onsite
286.	7. Evacuation of a specific emergency response facility (ERF) will be considered when habitability or function of that facility is questionable		Non-RIE  Evacuation of any area on the site is considered if habitability of that facility is questionable.  Section H of the CEP describes alternate facilities if ERF functionality is compromised.
287.	e. Personnel Accountability Assembly and Evacuation actions are contained in Step 4.1.1.d and Table 6 2. Personnel accountability shall be conducted at an Alert classification or higher. Accountability is the responsibility of the Shift Manager or Emergency Coordinator, in conjunction with the Security Liaison. During an emergency situation that requires personnel in the plant to assemble in the various assembly areas, management personnel should help ensure that all their personnel are accounted for. Accountability, within the Protected Area of the plant, should take no longer than 30 minutes from the time of the announcement. The Security Supervisor will verify complete accountability using the security	[CEP – J.1]  NextEra maintains procedures to provide for a range of protective actions for all areas controlled by the site. Protective actions have been developed for radiological incidents and to protect personnel during hostile actions directed at the site.  Sitewide notifications and announcements are routinely made using the Public Address (PA) system. Personnel on site are notified of a declared emergency through the PA system.  Visitors within the Protected Area are escorted by badged individuals. The escort is responsible for controlling and directing their assigned visitors regarding actions required by any announcements and alarms.	Procedure details on how and who performs specific task. removed from the Emergency Plan. Section B of the plan identifies ERO members task with ensuring the performance protective actions.

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	computer or the manual accountability procedure and will forward this information to the Emergency Coordinator. If the TSC is not activated, this information will be forwarded to the Shift Manager. If personnel are unaccounted for, teams will be dispatched to locate and, if necessary, rescue the personnel. Personnel accountability procedures are included in the EPIPs.  Accountability outside the Protected Area is accomplished by Security physically entering the plant buildings to check for personnel. Aid to affected personnel will be provided as specified in Section 6.0.	Security personnel are used, as available, to augment PA announcements and to check OCA areas for remaining individuals. [CEP – J.4]  The emergency alarm, together with the public address system, is used to alert and notify on-site personnel of the need for assembly at a Site Area or General Emergency classification level (or earlier at the discretion of the Emergency Director). ERO personnel report to their assigned emergency response facility.  Typically, accountability of personnel inside the Protected Area is completed within 30 minutes of event declaration.	
288.	f. Radiological Monitoring of Personnel Evacuated from Site Requirements for external radiation exposure monitoring are contained in Section 5.0. A combination of checking Self Reading Dosimeters (SRD)s, if worn, and questioning of evacuees will be used to determine if there were any significant external exposures received prior to evacuation. Section 6.0 addresses appropriate actions for any known or suspected overexposures. If normal contamination monitoring is not possible, monitoring for contamination and internal exposure at the SBCC and OSC shall be accomplished by using portable instrumentation, as necessary. Any persons suspected or known to have ingested or inhaled radioactive material will be whole body counted to assess internal exposure as soon as conditions permit.	[CEP – J.3] Personnel evacuating are monitored for contamination, and, if possible and necessary, decontaminated before leaving the site. If conditions do not allow for decontamination of personnel on-site, they will be directed to designated offsite reception center(s) for radiological monitoring and decontamination, if required.  [CEP – L.2.e] The Radiation Emergency Assistance Center Training Site (REAC/TS) located at Oak Ridge, Tennessee, will respond to and/or provide advice and assistance to offsite medical facilities in the event of a severe radiation accident.	Editorial  No added, removed or altered commitments or change of intent.
289.	4.1.2 Offsite Area (Area Beyond the Exclusion Area)  a. Dose Projections (Reference 7.6)  Dose projections may be performed by a software application using meteorological information, plant parameters, and a dose assessment process to perform real time dose assessments during an inadvertent release of radioactive materials.  Terminals for completing dose projections are located	[CEP – I.1.b]  NextEra uses site specific versions of the Unified RASCAL Interface (URI) off-site dose projection computer model. The underlying dose assessment model in URI is the NRC RASCAL 4 model, based on the methods and equations documented in NUREG-1940.  The URI model provides off-site radiological dose and	Editorial  No added, removed or altered commitments or change of intent.

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	in the Control Room, TSC and EOF. Meteorological data is stored and processed in the Plant Process Computer System (PPCS/PI) as described in EP Appendix L. Radiological effluent monitoring data is also available from PPCS/PI and may be manually entered into the dose assessment program. With meteorological and effluent release data available, calculations of atmospheric dispersion and offsite radiation dose from the plume can be made. Dose calculations are made for Total Effective Dose Equivalents (TEDE) and Thyroid Committed Dose Equivalents (Thyroid CDE). Calculation results can be printed in report format. Projected calculations take into account values of time of release and duration of release. The dose assessment computer allows accident dose calculations to be made before results from the offsite Field Monitoring Teams are received. Manual calculation methodologies for offsite dose calculations are available in case of computer system failures.	dose rate estimates based on near real time or hypothetical inputs. Projected dose is based on EPA-400-R92-001 dose conversion factors and provided as; (1) the total effective dose equivalent, or TEDE (the sum of the effective dose equivalent from immersion, 4 days of ground deposition, and the committed effective dose equivalent from inhalation), and (2) the committed dose equivalent to the thyroid (CDE thyroid).  URI dose projection results are given for various locations from the site boundary to 10 miles. URI is capable of providing dose assessment results for multiple release points from the site.	
290.	Field Monitoring Team results may be used to verify the dose calculations. Field Monitoring Teams will conduct a search for the plume, obtain dose rates, and sample at pre designated sample locations as described in EP Appendix C.	[CEP – I.1.c] Environmental surveys inside and outside the protected area are performed by Field Monitoring Team members under the direction of the EOF RP Coordinator. Field monitoring teams are directed to track and evaluate a radioactive plume by monitoring radiation levels and by obtaining and analyzing air samples. Field monitoring surveys and sampling may be performed at pre-identified locations or other geographic locations within the EPZ determined during the event. Samples taken by the offsite monitoring teams will be evaluated further by one of the available laboratory facilities described in Element C.4.	Editorial  No added, removed or altered commitments or change of intent.
291.	The EOF RP Manager or the Site Radiation Protection Coordinator (SRPC) may determine the applicable dose rates in the EPZ and calculate an estimated total population dose. The Emergency Director shall ensure that radiological information is transmitted to offsite authorities. The Emergency	[CEP – B.1.a] The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions 2. Technical Support Center (TSC)	Editorial  No added, removed or altered commitments or change of intent.

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	Coordinator shall ensure recommendations for protective actions are transmitted to the offsite authorities.	A. Site Emergency Director	
292.	b. Action Criteria Required protective actions for offsite areas are discussed in the state and county plans. The ERO shall classify the accident (Reference EP 4.0) and notify the federal, state, and county authorities. The State plan has adopted the U.S. Environmental Protection Agency's Protective Action Guides for initiating actions to protect public health and safety. The county and state agencies have detailed plans for activating their agencies, taking various protective actions, and performing social services. Protective Action Recommendations for people offsite shall come from the Emergency Coordinator. The criteria for recommending protective action strategies to be taken in areas beyond the Exclusion	<ul> <li>[CEP – J.6]</li> <li>NextEra sites have developed PARs, in accordance with agreements made with the state agencies, for the plume exposure pathway EPZ that include evacuation, sheltering, and recommendations for radioprotective Potassium Iodide use based on the following:         <ul> <li>NUREG-0654/FEMA-REP-1, Supplement 3, Guidance for Protective Action Strategies, November 2011</li> <li>EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, May 1992</li> <li>Guidance for Industry, KI in Radiation Emergencies, Questions and Answers, FDA,</li> </ul> </li> </ul>	Non-RIE CEP implements a PAR process consistent with regulatory guidance. Actual implementation of Protective Actions for the public is the responsibility of the States and Counties. No added, removed or altered commitments or change of intent.

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	Area encompass a number of factors and considerations. The determination of what emergency protective actions should be implemented in any given accident situation must be based on the actual plant conditions that exist or that are projected at the time of the accident, with the consideration of weather conditions, local protection factors for typical residential units, evacuation times, release potential, and projected or potential doses. Therefore, the effective means in utilizing and applying protective actions in the event of an accident is an important consideration to reduce radiation exposure to the general public.	December 2002  Potassium lodide as a Thyroidal Blocking Agent in Radiation Emergencies, FDA Guidance, November 2011  PARs for the general public will be based on plant conditions and/or offsite dose assessment results.  PARs beyond the 10-mile EPZ will be developed on an "ad hoc basis" from projected or measured dose in excess of EPA PAGs. Because dose projection accuracy is limited by distance, actual field measurements are used to corroborate projections before issuing PARs in areas outside the 10-mile EPZ.  The PAR strategy basis document is referenced in the site annexes.	
293.	Protective Actions for the public beyond the site boundary would apply to a radius of five miles in all directions from the plant and a larger radius of 10 miles from the plant in a sector greater than 60° (up to 360°) centered on the average downwind direction. The State of Wisconsin Emergency Management has sub divided the EPZ sectors into six subareas that reflect a best match between geographic boundaries and five and ten mile radii around the plant as further described in the Point Beach Evacuation Time Estimates (ETEs are discussed in EP Appendix J).	[CEP – Introduction]  • Site Evacuation Time Estimate (ETE) Study – The ETE study defines the plume exposure (~10 mile) Emergency Planning Zone (EPZ). It documents the population within defined areas of the EPZ and establishes evacuation routes and ETEs for different scenarios for those populations. The ETE study fulfills requirements of 10 CFR 50 Appendix E.IV paragraphs 2-7. [CEP – J.7]  NextEra offsite protective action recommendation strategies, informed by the ETE report, have been developed using guidance provided in NUREG-0654/FEMA-REP-1, Supplement 3, Guidance for Protective Action Strategies, in coordination with the state and local agencies.  [PBN Annex – J.8]  The PBN site specific ETE report is documented in EP-PBN-113, PBN Evacuation Time Estimate Study.	Editorial  Details on implementation of offsite protective actions remain in ORO emergency plans.  No added, removed or altered commitments or change of intent.
294.	There are various types of protective actions that can be implemented by the state and counties which include the following:  1. Population sheltering 2. Evacuation 3. Controlling food, milk, and water distribution	[CEP – J.6]  NextEra sites have developed PARs, in accordance with agreements made with the state agencies, for the plume exposure pathway EPZ that include evacuation, sheltering, and recommendations for radioprotective Potassium lodide use based on the	Editorial  Details on implementation of offsite protective actions remain in ORO emergency plans.  No added, removed or altered commitments or change of intent.

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	4. Prophylaxis (e.g., thyroid protection) 5. Individual protective actions (e.g., respiratory protection equipment and protective clothing) Table 6 3 lists protective actions that may be recommended for various accident phases and approximate time periods as a function of exposure pathways following an initiation of an accident. This information should be useful for appropriate state and county agencies in making value judgments that are necessary to plan actions in limiting the radiation exposure to the general public during an emergency at NextEra Energy Point Beach.	<ul> <li>NUREG-0654/FEMA-REP-1, Supplement 3, Guidance for Protective Action Strategies, November 2011</li> <li>EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, May 1992</li> <li>Guidance for Industry, KI in Radiation Emergencies, Questions and Answers, FDA, December 2002</li> <li>Potassium Iodide as a Thyroidal Blocking Agent in Radiation Emergencies, FDA Guidance, November 2011</li> <li>PARs for the general public will be based on plant conditions and/or offsite dose assessment results.</li> <li>PARs beyond the 10-mile EPZ will be developed on an "ad hoc basis" from projected or measured dose in excess of EPA PAGs. Because dose projection accuracy is limited by distance, actual field measurements are used to corroborate projections before issuing PARs in areas outside the 10-mile EPZ.</li> <li>The PAR strategy basis document is referenced in the site annexes.</li> </ul>	
295.	(a) Sheltering and Evacuation Protective actions such as sheltering and evacuation can provide protection for the public against exposure to gaseous radioactive fission products released during an accident at NextEra Energy Point Beach. Evacuation of the population in the plume exposure pathway to minimize public exposure to a passing radioactive cloud could be potentially 100% effective. However, the protective action of population sheltering may be more appropriate at the time of the accident with the consideration of such factors as weather conditions, wind direction, roadway conditions, duration and type of exposure, and projected or potential doses to the population.	<ul> <li>[CEP – J.6]</li> <li>NextEra sites have developed PARs, in accordance with agreements made with the state agencies, for the plume exposure pathway EPZ that include evacuation, sheltering, and recommendations for radioprotective Potassium lodide use based on the following:         <ul> <li>NUREG-0654/FEMA-REP-1, Supplement 3, Guidance for Protective Action Strategies, November 2011</li> <li>EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, May 1992</li> </ul> </li> </ul>	Editorial  Details on implementation of offsite protective actions remain in ORO emergency plans.  No added, removed or altered commitments or change of intent.
296.	(b) Shielding Shielding estimates for several distinct building types		Non-RIE State and County Emergency Plan

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	have been made by using currently available		and procedures address
	shielding technology. Table 6 4 through Table 6 6		implementation of Protective
1	present these estimates and indicate the wide range		Actions for the population at risk
1	of potential shielding factors afforded by normally		Removal information on shielding
	inhabited structures, and that basements of both		from the CEP does not result in any
	homes and large buildings offer very effective		added, removed or altered
	shielding against radiation. The shielding		commitments or change of intent for
	effectiveness of a structure is expressed in terms of a		NextEra.
	shielding factor which is the ratio of the dose received		
	inside the structure to the dose that would be		
	received outside the structure. The benefits of		
	population sheltering can be maximized by		
	recommending that windows and doors of homes be		
	closed and sealed, and ventilation systems turned off		
	to minimize the turnover rate of air within the building.		
297.	(c) Exposure Pathways		Non-RIE
	If there were an atmospheric release of radioactive		Removed wording. Discussion of
	materials, doses to the public could occur by external		exposure pathway does not contain
	radiation as the cloud passes, by exposure to		any commitments of actionable
	external radiation from radionuclides deposited on the		statements.
	ground and other surfaces, or by internal exposure		
	due to inhalation or ingestion of radionuclides. Levels		
	in excess of accepted protective action guides would		
	generally occur closer to the source so that the		
	protective actions could be recommended on a two		
	phased approach. The first phase would be to protect		
	individuals in these closer areas (i.e., within a 5 mile		
	radius), while the second phase could be a		
	recommendation to take shelter and institute food,		
	water, and milk control since the need for evacuation		
	versus sheltering in the 5 to 10 mile area may not be		
	evident. However, beyond 10 miles, there is little		
1	apparent distinction between the effectiveness of		
1	evacuation and sheltering in terms of minimizing		
	projected health effects.*		
	The protective actions discussed above are only a		
	few of the alternate courses of action which could be		
	taken in a radiological emergency.		
298.	6.0 AID TO AFFECTED PERSONNEL	[CEP – L.2.a]	Editorial
	Provisions have been made to assist personnel who	On-shift first aid personnel will provide first aid to	No added, removed or altered
	are injured or have received high radiation exposures.	individuals who are injured. Radiation protection	commitments or change of intent.

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	Many plant employees and some contractor personnel are trained in first aid and radiation protection procedures. First aid and decontamination facilities are available onsite and offsite, and necessary transportation services are also available. The following subsections describe measures to be used to provide necessary assistance.	personnel will provide contamination control support to potentially contaminated injured personnel  NextEra maintains first aid supplies, and equipment for the treatment of injured or contaminated injured persons. Descriptions of equipment and supplies, and radiological monitoring and decontamination equipment and supplies are in site procedures.  [CEP – L.2.b]  Arrangements have been made with local hospitals for the medical treatment of contaminated injured or over exposed personnel. These facilities and their services are available 24 hours per day.	
299.	6.1 Radiation Overexposure For any known or suspected overexposures, the	[CEP - K.1.b]	Editorial No added, removed or altered
	DLRs will be read as soon as possible, and further investigation will be conducted to determine the amount of exposure and the necessary action to be taken. Checking SRDs and questioning evacuees may be used to determine if there were any significant external exposures involved in the emergency.	Emergency worker exposure is monitored at the time of exposure by the use of electronic dosimeters. If direct measurement of airborne concentrations is not available at time of exposure, workers will be provided respiratory protection, when feasible, and total exposures will be calculated after the fact using follow up survey data and whole body counting equipment.  [CEP – K.1.c]  Personnel dosimeters are issued to and worn by NextEra radiation worker qualified personnel who may be required to work in Radiological Controlled Areas in accordance with radiation protection procedures.  Radiation protection personnel in the OSC and TSC have the responsibility to monitor and assess the radiation doses received by ERO personnel on a 24-hour per day basis throughout a declared event.  Personnel dose records are documented and managed using a computerized system. Should this system not be readily accessible or available, personnel dose is manually recorded.  Dosimeters are available and will be provided to offsite agency responders if they are required to enter a Radiological Controlled Area or are expected to receive a dose in excess of 100 mRem for the event.	commitments or change of intent.
300.	6.2 Decontamination	[CEP – K.1.e]	Editorial

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	Facilities and supplies for decontaminating personnel are available at the RP station and OSC. All personnel leaving the RCA or leaving a contaminated area will be monitored for contamination. During emergencies, other onsite personnel will be checked for contamination as necessary. Measures will be taken to minimize the spread of contamination. Such measures may include isolating affected areas, placing contaminated personnel in clean protective clothing before moving, and decontaminating personnel, their clothing, and equipment prior to release. Personnel found to be contaminated will be decontaminated under the direction of RP personnel.	On-shift first aid personnel will provide first aid to individuals who are injured. Radiation protection personnel will provide contamination control support to potentially contaminated injured personnel.  NextEra maintains first aid supplies, and equipment for the treatment of injured or contaminated injured persons. Descriptions of equipment and supplies, and radiological monitoring and decontamination equipment and supplies are in site procedures.	No added, removed or altered commitments or change of intent.
301.	Emergency first aid and medical treatment will be given to injured or ill personnel. Onshift personnel trained in first aid are available onsite, 24 hour per day, and will assist injured or ill personnel either at the scene of the accident or in the first aid room. If personnel must be transported to medical facilities, measures will be taken to prevent the spread of contamination if present. Such measures may include the placing of affected personnel in clean protective clothing or wrapping in blankets. If the injured individual is contaminated, the organizations who will provide the transportation and treatment shall be informed. The plant maintains an onsite first aid room. The first aid room is equipped with facilities suitable for the temporary care of a victim of an accident or illness until the services of a physician or transport can be obtained. Additional first aid supplies are available in strategic locations of the plant.	[CEP – L.2.a] On-shift first aid personnel will provide first aid to individuals who are injured. An RP Qualified Individual will provide contamination controls support to potentially contaminated injured personnel.  NextEra maintains first aid supplies, and equipment for the treatment of injured or contaminated/injured persons. Descriptions of equipment and supplies, and radiological monitoring and decontamination equipment and supplies are described in site procedures.	Editorial  No added, removed or altered commitments or change of intent.
302.	6.4 Medical Transportation In the event that offsite emergency medical transportation is required, the Manitowoc County Sheriff's dispatcher will be called. The dispatcher will determine who should respond to the emergency. Normally, the Mishicot emergency vehicle will respond first. If the Mishicot emergency vehicle is unavailable, the City of Two Rivers Fire Department emergency vehicle will respond.	[CEP – L.4] Injured personnel are evaluated for radiological contamination and packaged to control contamination prior to transport to a medical facility per radiation protection department procedures. NextEra personnel will assist with decontamination of transport vehicles if necessary.  Transportation agreements for contaminated injured personnel are described in site annexes.	Editorial  No added, removed or altered commitments or change of intent.

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303.	6.5 Medical Treatment Arrangements have been made with Aurora Medical Center Manitowoc County for treatment of personnel working at NextEra Energy Point Beach. Hospital personnel have been instructed and trained in treating potentially contaminated patients. In addition, arrangements have been made with two area physicians who maintain a medical affiliation with the Aurora Medical Center Manitowoc County for the medical treatment of potentially contaminated personnel from NextEra Energy Point Beach. The University of Wisconsin Hospital and Clinics in Madison, Wisconsin, will provide backup services in the event that the services of Aurora Medical Center Manitowoc County become unavailable or that additional services are required. The University Hospital provides instruction and training on handling radiological accident patients. Letters of Agreements with respect to arrangements for both hospitals and medical services are referenced in Appendix D.	[PBN Annex – L.4] Mishicot Ambulance Service is the primary provider for the transportation of contaminated, injured individuals. The City of Two Rivers may provide backup ambulance service to transport injured persons from PBN. Each service have the means to control contamination while transporting victims.  [CEP – L.2.b] Arrangements have been made with local hospitals for the medical treatment of contaminated injured or over exposed personnel. These facilities and their services are available 24 hours per day.  [PBN Annex – L.2.b] The primary and backup offsite medical facilities to treat contaminated, injured personnel from PBN are: Primary – The Aurora Medical Center – Manitowoc County will provide medical assistance to PBN personnel. The Aurora Medical Center maintains a facility equipped to provide first aid, emergency medical stabilization treatment, and decontamination for ill or injured personnel from plant. It is available 24 hours a day, and is equipped with a sink, decontamination supplies, protective clothing, signs, and other necessary equipment.  Backup –University Hospital and Clinics in Madison, Wisconsin, may be utilized if the treatment required extend beyond the capabilities of the Aurora Medical Center. The University Hospital provides instruction and training on handling radiological accident	Editorial No added, removed or altered commitments or change of intent.
304.	6.6 Iodine Prophylaxis (Thyroid Protection)	patients.	Non-RIE
	6.6.1 Background A number of chemical compounds can be ingested before or shortly after inhalation of radioactive material to inhibit the biological assimilation of inhaled radionuclides. Of these, stable iodine has received more attention as a chemical prophylactic agent than other elements because inhaled radioiodine presents a radiological hazard under certain types of nuclear reactor accidents.		Background wording contains no commitments or actional statements. Removal does not reduce or altered commitments or change of intent.

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205	Radioiodine is quickly absorbed into the blood stream and concentrates primarily in the thyroid gland. This can result in significant doses to the thyroid. Therefore, a protective action to be considered after an accident involving the release containing radioactive iodine is the use of stable iodine as a thyroid blocking agent. This can reduce the accumulation of radioactive iodine in the thyroid gland.	TOTAL ACT	
305.	6.6.2 Criteria for Use The criteria for administering a thyroid blocking agent (Potassium lodide) to emergency personnel depends on the projected absorbed dose to the thyroid based on the severity and magnitude of the accident. If the initial estimate indicates a thyroid committed dose equivalent of 25 rem CDE or more, a thyroid blocking agent will be distributed to plant emergency and support personnel. Prior to distribution, the SRPC or EOF RP Manager will make this recommendation with final approval by the Emergency Coordinator until relieved by Emergency Director. For the greatest effectiveness, the thyroid blocking agent should be administered as soon as possible, preferably before the exposure or within two hours of exposure. For most individuals the majority of radioiodine uptake by the thyroid occurs within 12 hours after a short-term exposure. The initial administration of a blocking agent will be of some value even as long as 4 8 hours after the exposure period. The determination of whether the thyroid blocking agent should be continued on a daily basis will be made by the Medical Services Division after evaluation of the situation.	[CEP – J.5]  2. Individual Thyroid Protection Efforts are made to utilize respiratory protective equipment to minimize ingestion and/or inhalation of radionuclides and to maintain internal exposure below the limits specified in 10 CFR 20, Appendix B. However, if an emergency involves the accidental or potential ingestion or inhalation of radioactive iodine, Potassium Iodide tablets (KI) are maintained and available for distribution. The administration of potassium iodide (KI) to NextEra and vendor personnel may be used to mitigate the consequences of inhalation of radioiodine during an emergency. The process for administration of radioprotective drugs is described in implementing procedures.	Non-RIE Removed procedure level details from plan. Commitment to evaluate for use of KI and provide as necessary remains.
306.	Table 6-1, Assessment Actions		Non-RIE Table removed No added, removed or altered commitments or change of intent.
307.	Table 6-2, Assembly and Accountability Actions		Non-RIE Table removed No added, removed or altered

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			commitments or change of intent.
308.	Table 6-3, State and County Agencies Possible		Non-RIE
	Protective Actions		Table removed
			No added, removed or altered
			commitments or change of intent.
309.	Table 6-4, Representative Shielding Factors from		Non-RIE
	Gamma Cloud Source		Table removed
			No added, removed or altered
			commitments or change of intent.
310.	Table 6-5, Selected Shielding Factors for Airborne		Non-RIE
	Radionuclides		Table removed
			No added, removed or altered
			commitments or change of intent.
311.	Table 6-6, Representative Shielding Factors for		Non-RIE
	Surface Deposited Radionuclides		Table removed
			No added, removed or altered
	T		commitments or change of intent.
312.	Table 6-7, Use of Protective Equipment and Supplies		Non-RIE
			Table removed
			No added, removed or altered
0.10	Table C.O. Cuidelines for Dretaction Assinct Investiga		commitments or change of intent.
313.	Table 6-8, Guidelines for Protection Against Ingestion of Contamination		Non-RIE
	of Contamination		Table removed
			No added, removed or altered commitments or change of intent.
314.	Table 6-9, Maximum Yearly Federal Dose Levels		Non-RIE
314.	Table 0-9, Maximum Teamy Tederal Dose Levels		Table removed
			No added, removed or altered
			commitments or change of intent.
315.	Table 6-10, Guidance on Dose Limits for Workers		Non-RIE
0.10.	Performing Emergency Services		Table removed
			No added, removed or altered
			commitments or change of intent.
	10. EP 7.0, Emergency Facilities and		
	Equipment, R70		
316.	1.0 DISCUSSION	[CEP – H]	Non-RIE
	This section of the Emergency Plan identifies,	Adequate emergency facilities and equipment to	Section purpose descriptions
	describes, and gives locations of emergency	support the emergency response are provided and	replaced with planning standard

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	operation centers, support centers, communication systems, and first aid and medical facilities. EP Appendix M, Matrix for Emergency Preparedness Equipment, also provides a snapshot of Emergency Preparedness related equipment, including the location, purpose, and regulatory requirement of such equipment. This appendix was developed as a NextEra Energy Point Beach Excellence Plan Confirmatory Action Letter (CAL) commitment. (B 3)	maintained. [CEP – P.12] Changes in plant configuration are evaluated for their impact on the effectiveness of the emergency plan through the plant modification or license compliance review processes specified in change procedures and, if required, the 10 CFR 50.54(q) change evaluation process.	wording. Appendix M is a listing of equipment important to EP. PBN procedure EPMP 9.0, Equipment Important To Emergency Response now contains tables listing this equipment.
317.	2.0 CENTERS FOR EMERGENCY OPERATIONS The Emergency Response Facilities (ERFs) are coordinated centers, separated physically to minimize interference and confusion, and connected by dedicated communications lines to ensure an uninterrupted flow of information. Figure 7 1 shows the emergency communications network that will allow coordination of all phases of the emergency response operations.	[CEP—F.1.a]  Each site maintains communications systems that are designed to facilitate normal and emergency communication. Refer to Chapter 9 of the UFSARs for descriptions of the primary site communications systems.  Provisions exist for continuous capability of communications with OROs and the NRC. Systems available for internal and external communications include:  Telephone Systems Public Address System Radio Communications Cellular Telephones Satellite Telephones Local and Wide Area Networks Data Systems Cellular and satellite telephones provide communications capability should the main telephone	Editorial Removed introduction wording of section. Section purpose descriptions replaced with planning standard wording. Communications systems are described in section E of CEP and site annex. No added, removed or altered commitments or change of intent.
318.	2.1 Emergency Operations Facility (EOF) (See EP 2.0) The EOF is located at 3060 Voyager Drive, Green Bay, WI. Communications links will be maintained with the TSC, JIC, and corporate offices, designated offsite federal and state agencies, and offsite field monitoring teams. Up to 700 sq. ft. can be made available to accommodate state and local agency personnel. No special provisions for protection factors or ventilation protection are needed. This facility, under the direction of the Emergency	[CEP – H.3] The Emergency Operations Facility (EOF) provides a dedicated location for support of the site event response activities. The EOF is sized to accommodate ERO responders and NRC, FEMA, and state representatives. The EOF is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the EOF's primary functions include:	Editorial  No added, removed or altered commitments or change of intent.

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	Director, is the focal point for overall NextEra Energy Point Beach emergency response and is the location of primary interface between NextEra Energy Point Beach and offsite agencies. This facility will be activated by plant personnel within 90 minutes of the declaration of an Alert or higher classification. Comprehensive coordination is achieved by:	<ul> <li>Coordinate emergency response activities with federal, state, and local authorities</li> <li>Coordinate support activities performed by personnel brought in to assist NextEra personnel</li> <li>Perform offsite dose assessment and field monitoring activities.</li> <li>Development of dose based offsite protective actions recommendations.</li> <li>Coordination of emergency response activities with federal, state, and local authorities.</li> <li>Coordination of radiological and environmental assessment activities with offsite agencies.</li> <li>Communicate with the NRC HPN line.</li> <li>Coordinate corporate support.</li> <li>Support site acquisition of external assistance (technical, craft, admin, etc.).</li> <li>Support site acquisition of equipment, supply, and logistic resources.</li> <li>Because the EOF is located outside the plume exposure EPZ for all NextEra sites, specialized ventilation systems and radiological monitoring are not required. The EOF ventilation system is consistent in design with standard building codes.</li> <li>Each EOF provides communications to the Control Room, TSC, field monitoring teams, NRC, and OROs. The EOF has the capability for the acquisition, display, and evaluation of unit, radiological and meteorological conditions necessary to perform accident assessment and determine protective measures. The EOFs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&amp;IDs), electrical schematics and plant procedures as either electronic or paper documents.</li> <li>The EOF has the capability to support the remote response of ERO positions.</li> <li>[PBN Annex – H.3]</li> <li>The Emergency Operations Facility (EOF) is located at 3060 Voyager Drive, Green Bay, WI.,</li> </ul>	

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		approximately 24 miles northwest of the plant. The EOF provides working areas for Federal, State and local response personnel. Including conference areas with white boards, separate briefing/debriefing areas, telephones, ERO telephone contact lists, access to the internet, necessary office supplies and photocopier access, and access to plant radiological information.	
319.	2.1.1 The Emergency Director is located in this facility and responsible for the overall management of the emergency response and recovery operations for the NextEra Energy Point Beach.		Non-RIE Details on location and responsibilities of ERO members contained in Section B.1.a or CEP
320.	2.1.2 Maintaining communication links with the other Emergency Response Facilities (ERFs) and receiving periodic updates of the progress of the emergency procedures.  2.1.3 Providing a single contact point for state and local emergency response agencies and providing timely, accurate information.  2.1.5 Providing for offsite radiological surveys including transportation, equipment, and personnel.  2.1.6 Act as focal point for security and traffic control.  2.1.11 Primary interface between outside organizations, responding vendors and contractors.  2.1.12 Monitor meteorological data, plant conditions and data.  (See out of sequence items below)	<ul> <li>[CEP - H.3]</li> <li>EOF's primary functions include:</li> <li>Coordinate emergency response activities with federal, state, and local authorities</li> <li>Coordinate support activities performed by personnel brought in to assist NextEra personnel</li> <li>Perform offsite dose assessment and field monitoring activities.</li> <li>Development of dose based offsite protective actions recommendations.</li> <li>Coordination of emergency response activities with federal, state, and local authorities.</li> <li>Coordination of radiological and environmental assessment activities with offsite agencies.</li> <li>Communicate with the NRC HPN line.</li> <li>Coordinate corporate support.</li> <li>Support site acquisition of external assistance (technical, craft, admin, etc.).</li> <li>Support site acquisition of equipment, supply, and logistic resources.</li> </ul>	Non-RIE Proposed plan maintains overall command and control of emergency response with the Site Emergency Director located in the TSC. CEP EOF functions reflect this change. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks of the CEP.
321.	2.1.4 Coordinating the transfer of injured personnel who are radiologically contaminated and need treatment by local health care personnel.		Non-RIE Details on location and responsibilities of ERO members contained in Section B.1.a of CEP
322.	2.1.7 Act as focal point for technical review of information released to the media.		Non-RIE Details on location and

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			responsibilities of ERO members contained in Section B.1.a of CEP
323.	2.1.8 Disseminating information to the corporate personnel for technical and administrative support.		Non-RIE  Details on location and responsibilities of ERO members contained in Section B.1.a of CEP
324.	2.1.9 Managing recovery operations of an emergency (long term staffing, scheduling, and expediting).		Non-RIE Details on location and responsibilities of ERO members contained in Section B.1.a of CEP
325.	2.1.10 Implement Quality Control program for construction and repair tasks that may be necessary.		Non-RIE Details on location and responsibilities of ERO members contained in Section B.1.a of CEP
326.	2.2 Technical Support Center (TSC) (See EP 2.0) The TSC is located on El. 8□ of the Admin Building. There are direct communication links with the Control Room, OSC, and EOF.  This facility, under the direction of the Emergency Coordinator coordinates all onsite emergency response. This facility will be activated by plant personnel within one hour of the declaration of an Alert or higher classification. This facility provides: 2.2.1 The primary communications link between the Control Room, OSC, and EOF.  2.2.2 The focal point for all onsite activities during emergency response.  2.2.3 Technical and management support of the Control Room.  2.2.4 Plant Process Computer System (PPCS) monitoring plant parameters to provide real time data to technical advisory personnel for the evaluation of plant conditions and recommendation of response procedures. These parameters can be obtained directly from PPCS/PI LAN workstations.  2.2.5 A technical reference library with files containing appropriate drawings and system descriptions.  2.2.6 Onsite monitoring directed from the TSC to assist in radiological surveys, personnel monitoring,	<ul> <li>[CEP - H.1]</li> <li>The Technical Support Center (TSC) provides a dedicated location for management and technical support to operations personnel and to relieve the operations staff of emergency response actions and communications not related to plant system manipulations. The TSC is sized to accommodate ERO responders and NRC representatives.</li> <li>The TSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the TSC's primary functions include:</li> <li>Provide ERO command &amp; control</li> <li>Continued evaluation of event conditions</li> <li>Develop and issue offsite protective actions recommendations</li> <li>Develop ORO event notifications</li> <li>Provide ENS communications with the NRC</li> <li>Display and trend plant data</li> <li>Develop response priorities and mitigative actions</li> <li>Coordination of site emergency response actions</li> <li>Provide engineering support</li> </ul>	Editorial  No added, removed or altered commitments or change of intent.

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#	decontamination, reentry, and rescue procedures.  2.2.7 Current meteorological information obtained from PPCS/PI LAN workstations.  2.2.8 Implementation of recovery operations.  2.2.9 Backup RP counting and sample analysis facility.  2.2.10 Independent engineering and technical support as requested.  2.2.11 RMS release point, process, and area monitoring information.	Personnel in the TSCs are protected from radiological hazards, including direct radiation and airborne contaminants under accident conditions, with radiological habitability standards similar to the Control Room. To ensure adequate radiological protection, radiation monitoring equipment is located in the TSCs, or periodic radiation surveys are conducted. These systems indicate radiation dose rates while in use. In addition, potassium iodide (KI) is available to TSC personnel for use.  Each TSC provides communications to the Control Room, OSC, EOF, Corporate Headquarters, NRC, and OROs.  The TSCs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.  TSC has the capability to support the remote response of the ERO engineering positions.  [PBN Annex – H.1]	Change Type
327.		The Technical Support Center (TSC) located on Elevation 8' of the Admin Building within 5 minutes walking distance of the Control Room.  The facility has the capability to supply and display technical information for use by technical and designated management personnel in support of reactor operations and Control Room functions during emergency and recovery operations. The TSC has its own emergency ventilation system.  If the TSC is unavailable, the Control Room is the designated backup TSC for radiological emergencies; otherwise, NSB Second floor or EOF may be used. [PBN Annex – C.4]  The station's main chemistry laboratory and a backup chemistry laboratory located in the TSC Building are equipped for chemical & radiological analyses.  [CEP – H.2]	Editorial
	2.0) The OSC is located on El. 8□ of the Admin building.	The Operations Support Center (OSC) provides a dedicated location for coordinating and planning	No added, removed or altered commitments or change of intent.

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	There are direct communication links with the TSC and the Control Room. This facility, under the direction of the Lead OSC Supervisor, coordinates incoming and outgoing personnel during emergency reentry operations. This facility will be activated by plant personnel within one hour of the declaration of an Alert or higher classification. The field monitoring teams deploy from the OSC and are controlled by the Site Radiation Protection Coordinator (SRPC) until relieved by the EOF RP Manager. The OSC provides: 2.3.1 Staging area to brief Control Room personnel of the emergency condition of the plant and thus minimize shift turnover time. 2.3.2 Coordination area for fire fighting activities. 2.3.3 Coordination area for mechanics, electricians and technicians to be dispatched to areas requiring their support. 2.3.4 Coordination area for search and rescue searches of missing persons or security breaches. 2.3.5 Functions as the dispatch center for all personnel reentering the plant. 2.3.6 Personnel accountability, contamination monitoring, and a decontamination point for evacuated visitors, plant and contractor personnel. 2.3.7 A radiation protection (RP) control point for individuals entering or leaving the site.	event response activities and for staging personnel and equipment. The OSC is sized to accommodate ERO responders.  The OSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the OSC's primary functions include:  Provide staging area for maintenance, operations, RP, and other support personnel  Provide for briefing, dispatch, and coordination of emergency response teams  Dosimetry (dose of legal record and self-reading capable of monitoring emergency radiation exposure), respiratory protection, radiation survey equipment, and RWPs are available to OSC personnel. In the event of a personnel contamination, decontamination will be performed in the area normally designated for this purpose.  Radiation and contamination levels in and around the OSC are assessed during emergencies.  Each OSC provides communications to the Control Room, TSC, and emergency response teams.  The OSCs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.  [PBN Annex – H.2]  The Operations Support Center (OSC) located on Elevation 8' of the Admin Building near to Technical Support Center (TSC).  In the event the OSC must be evacuated, the NSB 2nd floor if the primary relocation area or if radiological conditions prevent its, responsibility for reentry teams will be provided from the Control Room.	Non-RIE
	The Control Room is the primary operations center during events classified as Unusual Event and prior to		The Control Room is described in the UFSAR.

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	the activation of the other ERFs for more serious accidents. The Shift Manager is responsible for initiating and coordinating all appropriate Emergency Plan Implementing Procedures (EPIPs) from the Control Room until other ERFs are activated to assume responsibilities. All plant control manipulation is conducted from this area under the Shift Manager's cognizance. Access to the Control Room is administratively controlled.		Functions of shift ERO personnel are provided in Section B.1.a of the CEP.
329.	2.5 Security Building (Extension Building) (See EP 2.0) This facility, located in the extension building, is under the supervision of the Security Liaison in the TSC, who coordinates: 2.5.1 Primary access control at the gatehouse or Site Boundary Control Center to limit both personnel and vehicular traffic to and from the site. 2.5.2 Control point for personnel accountability during plant assembly and evacuation procedures. 2.5.3 Site security personnel assist as required with the emergency response operations. They initially report to the Security Supervisor until the TSC Coordinator and/or Security Liaison arrives. In the event that the security building is not radiologically habitable, the designated alternate location for security functions is the SBCC.		Non-RIE The Security Building is described in the Security Plan. Functions of ERO personnel are provided in Section B.1.a of the CEP.
330.	2.6 Joint Information Center (JIC) (See EP 2.0) The JIC is located at 3060 Voyager Drive, Green Bay, WI. The JIC will be activated at an Alert or higher classification. This facility, under the direction of the JIC Manager, is responsible for providing the news media with information concerning the emergency and ensuring that accurate information is provided to the public. This facility will provide periodic updates of the emergency situation and coordinate the public relations of offices for NRC, FEMA, state, and local agencies to ensure that consolidated official status reports are provided. The JIC will maintain communications links with the EOF and designated offsite news media agencies. An emergency hotline	<ul> <li>[CEP – D.3]</li> <li>A summary of response actions taken at each ECL is as follows:</li> <li>Alert</li> <li>The Joint Information System shall be established at this ECL, with Joint Information Center activation determined in coordination with the offsite agencies.</li> <li>Site Area Emergency</li> <li>The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).</li> <li>[CEP – H.5]</li> </ul>	Non-RIE Implementation of JIS Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

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331.	telephone number will be available for the public.	A near-site JIC (outside the 10 mile EPZ) is established for each site. ERO staffing of the JIC is concurrent with other ERFs, although facility activation is coordinated with the joint offsite agencies and has no time requirement.  When activated the JIC functions as a physical location for interacting with the media and for coordination between NextEra, federal and ORO PIOs regarding communications information to the public and the media.  NextEra provides space and equipment at their corporate facility to provide coordination of public information response activities with site and corporate JIS/JIC personnel.  [PBN Annex – H.5]  The Point Beach Near-Site JIC is located with the EOF at 3060 Voyager Drive, Green Bay, WI.  [CEP – H.4]  An alternative facility provides a location for the staging of ERO personnel in the event of a Security or Hostile Action threat for each NextEra site. The alternative facility may also serve as an evacuation location for TSC and OSC personnel should those facilities become uninhabitable.  The alternative facility can communicate with the Control Room, site security, and EOF. The functions of offsite notification and PARs can be performed from the Alternative Facility. Emergency response team planning and preparation can be performed from the Alternative Facility. Emergency response team planning and preparation can be performed from the Alternative Facility. Emergency response team planning and preparation can be performed from the Alternative Facility. In The Two Rivers Fire Department (TRFD) is designated as an Alternative Facility which is to be used as a staging area. The TRFD is located at 2122	Editorial No added, removed or altered commitments or change of intent.
332.	3.0 COMMUNICATIONS SYSTEMS  The details of the applies and effects amorganize	Monroe Street, Two Rivers, WI.  [CEP – F.1.a]	Editorial
	The details of the onsite and offsite emergency communications networks are shown in Figure 7 1.  The systems are designed to provide reliable communication links between the various emergency	Each site maintains communications systems that are designed to facilitate normal and emergency communication. Refer to Chapter 9 of the UFSARs for descriptions of the primary site communications	No added, removed or altered commitments or change of intent.

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centers and offsite authorities. It consists of a combination of the plant public address system, plant telephone system, multiple telephone lines to outside exchanges, including dedicated telephone lines, utility communications and paging system, and radio communications facilities. A brief detailed description is as follows:

- 3.1 Internal plant five channel multi station public address system (Gai tronics). Each public address station has the capability of general announcement or party line conversation via any channel.
- 3.2 An Internet Protocol Telephone (IPT) system is the primary system for about a thousand phones at Point Beach, including those in the Control Room, TSC and OSC. It also provides backup phones in the EOF and JIC. Redundant call manager servers use the local computer network to route calls. External phone calls are routed to the public telephone network over the wide area network to the corporate exchange in Florida or over a direct connection to the local exchange in Mishicot. These paths are redundant. Uninterruptable Power Supplies protect phone system and network components from short duration power interruptions.
- Outgoing stationary satellite system communications are available from all the Emergency Response Facilities through the PBNP IPT lines. Direct satellite phone units (independent of the IPT system) are available in the Control Room, TSC and EOF. Portable satellite phone units are available in the Control Room, TSC, OSC, EOF, JIC, and Security.
- 3.4 Mishicot, Wisconsin exchange lines; there are Mishicot exchange lines in the TSC and in the Control Room, Also, the Control Room, TSC and EOF have Federal Telecommunications System (FTS) circuits used for the emergency notification system (ENS), the health physics network (HPN), and the counterpart links as defined by the NRC.

3.5 A separate Internet Protocol Telephone (IPT) **Common Emergency Plan and Site Annex** 

Provisions exist for continuous capability of communications with OROs and the NRC. Systems available for internal and external communications include:

Telephone Systems

systems.

- Public Address System
- Radio Communications
- Cellular Telephones
  - Satellite Telephones
- Local and Wide Area Networks
- Data Systems

Cellular and satellite telephones provide communications capability should the main telephone systems lose power.

[PBN Annex – F.1.a]

An Internet Protocol Telephone (IPT) system is the primary system for about a thousand phones at Point Beach, including those in the Control Room, TSC and OSC. It also provides backup phones in the EOF and JIC. Redundant call manager servers use the local computer network to route calls. External phone calls are routed to the public telephone network over the wide area network to the corporate exchange in Florida or over a direct connection to the local exchange in Mishicot. These paths are redundant. Uninterruptable Power Supplies protect phone system and network components from short duration power interruptions.

A separate Internet Protocol Telephone (IPT) system provides telephone service to the EOF and JIC. It Telephone lines to outside exchanges include routes telephone calls through the Wide Area Network (WAN) connection and through two PRI communications lines to the local service provider. Telephone lines to outside exchanges include Mishicot, Wisconsin exchange lines; there are Mishicot exchange lines in the TSC and in the Control Room, Also, the Control Room, TSC and EOF have Federal Telecommunications System (FTS) circuits used for the emergency notification system (ENS)

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	system provides telephone service to the EOF and	the health physics network (HPN), and the	
	JIC. It routes telephone calls through the Wide Area	counterpart links as defined by the NRC.	
	Network (WAN) connection and through two PRI		
	communications lines to the local service provider.		
	3.6 The NextEra Energy Point Beach FM radio		
	system has base station consoles in the Control		
	Room, OSC, central alarm station, and the secondary		
	alarm station. The radio system utilizes an		
	automatically actuated radio transmitter (repeater)		
	which retransmits signals received from hand held		
	units. This extends the hand held units' range and		
	provides for better reception throughout the plant.		
	These hand held units are available in the Control		
	Room, TSC, Radiation Protection station, and from		
	Security. The radio system is used for in plant		
	security, in plant operations, in plant maintenance		
	and Radiation Protection surveys, and would be used		
	during emergencies. Using this radio system, Control		
	Room personnel can also communicate 24 hours a		
	day with the Manitowoc County Sheriff's Department.		
	This allows indirect communications with the Aurora		
	Medical Center Manitowoc County. The radio system		
	also provides a direct communications link with the		
	security building or the TSC from the Control Room.		
	A more detailed description of the NextEra Energy		
	Point Beach radio system is provided in the NextEra		
	Energy Point Beach Operating Instructions.		
	3.7 The EMnet phone system circuit is a unique,		
	dedicated telephone network and is used as the		
	primary means of notifying the state and counties of		
	events at NextEra Energy Point Beach. The system		
	allows for conference calling with any or all of the		
	following locations: Manitowoc and Kewaunee County		
	EOCs and Sheriff Dispatch centers, Wisconsin EOC		
	and State Patrol in Madison, and NextEra Energy		
	Point Beach TSC, EOF, and Control Room.		
	Commercial telephones are used as the back up		
	means for notification if the EMnet phone system		
	becomes out of service.		
	3.8 Radios are available for communications		
	between offsite field monitoring teams and the OSC.		

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	These radios are part of the FM radio system		
	discussed in EPMP 2.1. Cellular telephones are also		
222	available for field team use.	1050 0.41	Editorial
333.	4.0 ASSESSMENT FACILITIES The monitoring instruments and laboratory facilities needed to initiate emergency measures as well as those to be used for continuing assessment, are available both for onsite and offsite use.	NextEra has radiological laboratories located at each site. The site laboratories are the central point for receipt and analysis of onsite samples and includes equipment for chemical and radiological analyses. The laboratories provide analyses of samples from plant systems. Environmental monitoring sample analysis is also performed on-site or arrangements are made with off-site facilities.  Site specific details for the radiological laboratories are described in the site annexes.  [PBN Annex – C.4]  The station's main chemistry laboratory and a back-up chemistry laboratory located in the TSC Building are equipped for chemical & radiological analyses.  The Wisconsin State Laboratory of Hygiene (WSLH) offers a wide range of radiological testing services.  These services include testing environmental samples from nuclear power facilities.  [CEP – H.2]  Dosimetry (dose of legal record and self-reading capable of monitoring emergency radiation exposure), respiratory protection, radiation survey equipment, and RWPs are available to OSC personnel. In the event of a personnel contamination, decontamination will be performed in the area	Editorial No added, removed or altered commitments or change of intent.
334.	4.1 The geophysical, radiological, and fire	normally designated for this purpose.  [CEP – H.7]	Non-RIE
334.	detection onsite equipment and facilities are listed in Table 7 1 and/or EP Appendix M. Process monitoring of various plant parameters is via Control Room instrumentation and the PPCS or PI. PPCS/PI terminals are located in the Control Room, TSC and EOF. PI system data can be obtained from LAN workstations.  4.2 The geophysical, radiological, and fixed and mobile offsite equipment and facilities are listed on	NextEra sites have installed instrumentation for seismic monitoring, radiation monitoring, hydrologic monitoring, meteorological monitoring, and fire/ toxic gas/combustion products detectors in accordance with site Current Licensing Basis (CLB) documents.  1. Meteorological Monitoring Each NextEra site has a permanent on site meteorological monitoring station for the acquisition and recording of wind speed, wind direction, and	Removed descriptions of equipment provided in the UFSAR and Fire Protection Plan.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Table 7 2.	stability class for use in offsite dose projection.	
		Meteorological information is displayed in the Control	
		Room, TSC, and EOF. Refer to Chapter 2 of the	
		UFSARs for descriptions of the meteorological	
		monitoring systems.	
		2. Hydrologic Monitoring	
		Each NextEra site has hydrological monitors that	
		support the acquisition of data used for event	
		recognition and declaration. Refer to Chapter 2 of the	
		UFSARs for descriptions of the hydrologic monitoring	
		systems.	
		3. Seismic Monitoring	
		Each NextEra site has a seismic monitoring system	
		that supports the acquisition of data used for event	
		recognition and declaration. Refer to Chapter 3 of the	
		UFSARs for descriptions of the seismic monitoring	
		system.	
		4. Process and Area Radiation Monitors	
		Process Radiation Monitors (PRMs) measure	
		radioactive noble gas, iodine, and particulate	
		concentrations in gaseous effluent pathways and	
		gross radioactivity in other gaseous and fluid streams,	
		and are used for event recognition and declaration.	
		Area Radiation Monitors (ARMs) measure in-plant	
		dose rates and allow in-plant dose rate	
		determinations to be made remotely. This information	
		may be used to aid in the determination of plant area	
		accessibility for the protective action function.	
		Refer to Chapters 11 and 12 of the UFSARs for	
		descriptions of the PRM and ARM systems.	
		5. Portable Radiation Monitors	
		Portable radiation monitoring equipment is available	
		for uses such as area monitoring, sampling,	
		personnel surveys, and continued accident	
		assessment.	
		6. Sampling Systems	
		Liquid and gaseous sampling systems, consisting of	
		normal sampling systems and panels located	
		throughout the unit(s) at each site, are used for event	
		recognition and declaration. Refer to Chapter 9 of the	

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		UFSARs for descriptions the sites sampling systems.  7. Fire Detection Systems  The fire detection system, consisting primarily of fire/smoke detectors, control panel units, and annunciator panels, are used for event recognition and declaration. The fire detection equipment, alarms, and suppression equipment are described in detail in UFSAR Section 9.5 and in the sites' Fire Hazard Analysis Report.	
335.	4.3 Methods for detecting and measuring radioiodine concentrations in the field of 5 x 10 <sup>-8</sup> uCi/cc using a multi channel analyzer and silver zeolite filters have been established (B 2). Duane Arnold Energy Center has agreed to count iodine samples at the request of NextEra Energy Point Beach.	[CEP – I.7] NextEra field monitoring equipment has the capability to detect and measure airborne radioiodine concentrations as low as 1E-7 μCi/cc in the presence of noble gases. Air samples will be taken with portable air sampling equipped with a Silver Zeolite or equivalent cartridge and particulate filter. Interference from the presence of noble gas and background radiation is minimized by ensuring that monitoring teams move to areas of low background prior to analyzing the sample cartridge.  Air sample results can be estimated in the field through the use of portable monitors. The samples can be subsequently analyzed for greater precision by the laboratory facilities in C.4.  [PBN Annex – C.4] The station's main chemistry laboratory and a backup chemistry laboratory located in the TSC Building are equipped for chemical & radiological analyses. The Wisconsin State Laboratory of Hygiene (WSLH) offers a wide range of radiological testing services. These services include testing environmental samples from nuclear power facilities.	Non-RIE  Value changed to match regulatory requirements. Removed reference to Duane Arnold lab, primary and backup labs listed in annex.
336.	5.0 PROTECTIVE FACILITIES AND EQUIPMENT The Control Room is intended to serve as the onsite protective facility. It is designed to be habitable under accident conditions. Emergency lighting, power, air filtration, ventilation system, and shielding walls enable operators to remain in the Control Room to ensure the reactor can be maintained in a safe	[CEP – H.1] Personnel in the TSCs are protected from radiological hazards, including direct radiation and airborne contaminants under accident conditions, with radiological habitability standards similar to the Control Room. To ensure adequate radiological protection, radiation monitoring equipment is located in the TSCs, or periodic radiation surveys are	Non-RIE Removed details on Control Room design criteria which is described in the UFSAR. The TSC was designed to meet requirements of NUREG 0696 and was certified by the NRC.

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	condition. In addition, the operators will be able to evaluate plant conditions and relay pertinent information and data to the appropriate onsite and offsite emergency centers, personnel and agencies during all emergencies. To ensure that operating shift and other personnel can remain self sufficient, portable radiation monitors, respiratory equipment, portable lighting, and alternate communications systems are maintained in the Control Room. During extreme conditions, selected personnel from the TSC will evacuate to the Control Room.  The Technical Support Center is intended to serve as an onsite protective facility. It is designed to be habitable under accident conditions and is designed with a charcoal air filtration and ventilation system. Shielding walls and emergency lighting, plus emergency power enable emergency responders to remain in the Technical Support Center in their response to the event. This facility also includes a permanent radiation monitoring system, plant monitoring equipment, and alternate communications systems.	conducted. These systems indicate radiation dose rates while in use. In addition, potassium iodide (KI) is available to TSC personnel for use.	
337.	Lists of equipment and supplies available for both on and offsite locations which may be required for use during an emergency at NextEra Energy Point Beach can be found in the Emergency Plan Maintenance Procedures.	[CEP – H.11]  NextEra emergency equipment and kits are inventoried to verify adequate supplies and materials and inspect condition semi-annually and following each use.  Emergency use equipment and instruments are operationally checked semi-annually during the inventory, and prior to use if needed as specified in procedures.  Sufficient reserves of instruments and equipment are maintained to replace those removed from service for calibration or repair.	Editorial  No added, removed or altered commitments or change of intent.  Lists of equipment and supplies will be provided in EPIPs.
338.	6.0 FIRST AID AND MEDICAL FACILITIES 6.1 Onsite A permanent medical facility is provided onsite at NextEra Energy Point Beach. It contains the supplies needed for first aid treatment. Medical kits and stretchers are at strategic locations throughout the	[CEP – L.2.a] On-shift first aid personnel will provide first aid to individuals who are injured. Radiation protection personnel will provide contamination control support to potentially contaminated injured personnel. NextEra maintains first aid supplies, and equipment	Editorial No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	plant. The first aid treatment of injured personnel shall be administered by trained personnel.	for the treatment of injured or contaminated injured persons. Descriptions of equipment and supplies, and radiological monitoring and decontamination equipment and supplies are in site procedures.	
339.	Medical care beyond that available onsite may be obtained through local medical emergency responders dispatched by the Manitowoc County Joint Dispatch Center. Subsequently, seriously ill or injured individuals may be transported to a hospital for additional care in accordance with NextEra Energy Point Beach EPIPs.  NextEra Energy Point Beach, in cooperation with the Kewaunee Power Station and the Aurora Medical Center Manitowoc County, maintains a facility equipped to provide first aid, emergency medical stabilization treatment, and decontamination for ill or injured personnel from plant. The Aurora Medical Center Manitowoc County, which is available 24 hours a day, is equipped with a sink, decontamination supplies, protective clothing, signs and other necessary equipment.	[CEP – L.2.b] Arrangements have been made with local hospitals for the medical treatment of contaminated injured or over exposed personnel. These facilities and their services are available 24 hours per day.  Offsite medical facilities used to treat contaminated injured personnel are described in the site annexes.  [PBN Annex – L.2.b] The primary and backup offsite medical facilities to treat contaminated, injured personnel from PBN are: Primary – The Aurora Medical Center – Manitowoc County will provide medical assistance to PBN personnel. The Aurora Medical Center maintains a facility equipped to provide first aid, emergency medical stabilization treatment, and decontamination for ill or injured personnel from plant. It is available 24 hours a day, and is equipped with a sink, decontamination supplies, protective clothing, signs, and other necessary equipment.  Backup –University Hospital and Clinics in Madison, Wisconsin, may be utilized if the treatment required extend beyond the capabilities of the Aurora Medical Center. The University Hospital provides instruction and training on handling radiological accident patients.	Editorial No added, removed or altered commitments or change of intent.
340.	Industrial Health and Safety is responsible for defining the requirements for the first aid equipment throughout the plant, with medical services assistance as provided to NextEra Energy Point Beach. The Emergency Preparedness group is responsible for maintaining the medical supply inventory within strategic locations of the plant for emergency medical response per the EPIPs. The inventory list is contained in the Emergency Plan Maintenance Procedures (EPMP).	[CEP – H.11]  NextEra emergency equipment and kits are inventoried to verify adequate supplies and materials, inspect condition, and operationally check equipment/instruments semi-annually.  Requirements to operationally check emergency equipment and instruments prior to use, if needed, are contained in procedures.  Sufficient reserves of instruments and equipment are maintained to replace those removed from service for calibration or repair.	Non-RIE Removed specific details on who performs inventories, which will be detailed in EP maintenance procedures No added, removed or altered commitments or change of intent.

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341.	7.0 DAMAGE CONTROL EQUIPMENT AND SUPPLIES Damage control equipment consisting of fire hose stations, fire extinguishers, fire hydrants, and portable lanterns are located throughout the plant to be used by the fire brigade teams in the event of a fire. The NextEra Energy Point Beach Fire Protection Manual describes the specific details of fire protection, fire fighting, damage control including equipment usage and location. In addition, self contained breathing apparatus are located at strategic locations in the plant to be used as necessary for fire fighting, entry into airborne radioactive areas or entry into toxic gas areas. Miscellaneous equipment and supplies typically available for normal operations may be used to effect repairs depending on the situation at hand.  8.0 METEOROLOGICAL EQUIPMENT NextEra Energy Point Beach has a meteorological monitoring system with instrumentation at three stations. The primary and backup meteorological monitoring stations are located near shore. The third station is located about 8 miles inland and monitors for lake effect breezes. The system configurations are described in EP Appendix L and EP Appendix M. Meteorological data is displayed and recorded in the Control Room. Meteorological data is also available in the TSC and EOF from PPCS/PI LAN workstations. The meteorological monitoring system provides real time data of wind speed, wind direction, and temperature differential as an indicator of atmospheric stability. A description of the meteorological monitoring system, including testing and calibration, is provided in Appendix L. In the event that data from the NextEra Energy Point Beach meteorological monitoring system is unavailable, data can be obtained from the local Coast Guard Station or the National Weather Service	[CEP – H.7]  1. Meteorological Monitoring Each NextEra site has a permanent on site meteorological monitoring station for the acquisition and recording of wind speed, wind direction, and stability class for use in offsite dose projection. Meteorological information is displayed in the Control Room, TSC, and EOF. Refer to Chapter 2 of the UFSARs for descriptions of the meteorological monitoring systems.	Non-RIE Fire Protection Manual continues to describe the specific details of fire protection equipment. Normal tools and supplies are available to support emergency repairs No added, removed or altered commitments or change of intent.  Editorial No added, removed or altered commitments or change of intent.
343.	as described in Table 7 2. (B 2)  9.0 EMERGENCY RESPONSE DATA SYSTEM	[CEP—C.5.a]	Editorial
J4J.	(ERDS) The Emergency Response Data System (ERDS) is a	When an emergency occurs, ERO personnel will ensure ERDS operation as soon as possible but not	No added, removed or altered commitments or change of intent.

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	near real time electronic data link between PPCS and the NRC Operations Center that provides for automated transmission of a limited data set of selected parameters during an emergency event. ERDS is tested quarterly to verify system availability and operability. A description of any hardware and software changes that effect the transmitted data points are submitted to the NRC within 30 days after the changes are completed. Hardware and software changes that could effect the transmission format and computer transmission protocol are provided to the NRC as soon as practicable and at least 30 days prior to implementation of the change. (B 1) ERDS is activated upon declaration of an Alert, Site Area Emergency, or General Emergency.	later than one hour after an alert or higher emergency classification level is declared, in accordance with 10 CFR 50.72(a)(4).  [CEP – F.3] Table F-1 ERDS Verify Transmission Quarterly	
344.	10.0 PROMPT NOTIFICATION SYSTEM (B 4) Details of the NextEra Energy Point Beach prompt notification system is performed in accordance with Point Beach FEMA Rep-10 Design Report. The Integrated Public Alert and Warning System (IPAWS) is designed to provide notification of the public within 10 miles of NextEra Energy Point Beach.	[PBN Annex – E2] Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-PBN-115, PBN Alert and Notification System Design Report.	Editorial The Design Report is now considered part of the Emergency Plan. No added, removed or altered commitments or change of intent.
345.	11.0 MANITOWOC AND KEWAUNEE COUNTY EMERGENCY OPERATIONS CENTERS Manitowoc county has a permanent emergency operations center at the Manitowoc County Communications & Technology Building. Kewaunee County has a permanent emergency operations center at the Kewaunee County Fairgrounds 3rd Street Luxemburg. These centers are used for command and control of county agency response to an emergency.		Non-RIE County facilities described in County Emergency Plan
346.	Table 7-1, Additional Onsite Assessment Equipment & Facilities		Editorial  No added, removed or altered commitments or change of intent.  Lists of equipment and supplies will be provided in EPIPs.
347.	Table 7-2, Offsite Assessment Equipment & Facilities		Non-RIE Section H of the plan commits to providing facilities and equipment to

**Current Emergency Plan Common Emergency Plan and Site Annex** Change Type support emergency response. EPIPs will provide inventory lists. 348. Figure 7-1. NEXTERA Energy Point Beach Non-RIE Emergency Response Communications Network Communications systems described in CEP and site annex section F 11. EP 8.0, Maintaining EP, R57 DISCUSSION [CEP – Introduction] 349. Non-RIE NextEra Energy Point Beach maintains, as three The formal NextEra emergency plan for each NextEra Added details on what makes up separate documents, this Emergency Plan, the site consists of the following program and bases the Emergency Plan. Emergency Plan Implementing Procedures (EPIPs), documents: and the Emergency Plan Maintenance Procedures NextEra Common Emergency Plan - The (EPMPs). NextEra common emergency plan identifies and It is intended that the Emergency Plan be maintained describes the methods for responding to up to date by using established procedures contained emergencies and maintaining emergency in the Nuclear Procedures Manual. The EPIPs preparedness. Planning efforts common to all contain detailed information extracted from the Final NextEra power reactor sites are encompassed Safety Analysis Report (FSAR), other pertinent within the NextEra common emergency plan. documents, and detailed site specific emergency Site Emergency Plan Annex - The site procedures. The EPIPs are controlled by standard emergency plan annexes contain information plant administrative procedures and are revised and and guidance that is unique to the site. The site distributed accordingly. annexes are subject to the same review and The EPMPs contain procedures for Emergency Plan audit requirements as the common emergency equipment maintenance, offsite personnel plan. Emergency Plan training, and for the Emergency Site Emergency Action Level (EAL) Technical Preparedness Program review. Guidance for Basis Document (TBD) - The EAL TBD Emergency Plan drills and exercises is also provided establishes the classification scheme used to in site controlled documents. declare emergencies. The EAL TBD documents Approved changes to the Emergency Plan, EPIPs. references and inputs used to determine values and EPMPs are forwarded to offsite agencies and or events that would result in declaration of an included in training of site ERO individuals emergency. The EAL TBD fulfills requirements responsible for their implementation, as needed. of 10 CFR 50 Appendix E.IV.B.1. Revised procedures are marked to show where Site On-Shift Staffing Analysis – The on-shift changes have been made. staffing analysis documents that the minimum shift crew can perform the actions required by Emergency Operating Procedures (EOP) and the emergency plan, without task overlap or overburden, prior to Emergency Response Organization (ERO) augmentation. The on-shift staffing analysis fulfills requirements of 10 CFR

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		<ul> <li>Site Evacuation Time Estimate (ETE) Study – The ETE study defines the plume exposure (~10 mile) Emergency Planning Zone (EPZ). It documents the population within defined areas of the EPZ and establishes evacuation routes and ETEs for different scenarios for those populations. The ETE study fulfills requirements of 10 CFR 50 Appendix E.IV paragraphs 2-7.</li> <li>Site Protective Action Recommendation (PAR) Technical Basis Manual (TBM) – The PAR TBM document the bases used to develop site-specific protective action recommendation procedures. The PAR TBM fulfills requirements of 10 CFR 50 Appendix E.IV paragraph 3.</li> <li>Site Alert and Notification System (ANS) Design Report – The ANS design report is the FEMA-approved document that contains the specific design, testing, and maintenance of the system. The ANS design report fulfills requirements of 10 CFR 50 Appendix E.IV.D.3.</li> <li>[CEP P-7]</li> <li>Table P.7-1 provides a listing, by title, of the common response and maintenance procedures required to implement the emergency plan, and the section(s) of the emergency plan to be implemented by each procedure.</li> <li>A listing, by title, of the site-specific response and maintenance procedures required to implement the emergency plan is provided in the site annexes.</li> </ul>	
350.	2.0 RESPONSIBILITIES 2.1 Site Director The Site Director has the overall responsibility for radiological emergency response planning, including the development and updating of emergency plans and coordination of these plans with other organizations, corporate policy and plans, the FSAR, and the agreements and understanding with federal, state, and local organizations. They are also responsible for the coordination of efforts in planning,	[CEP — P-2] The Chief Nuclear Officer has the overall authority and responsibility for the NextEra Common Emergency Plan.	Editorial Title change. No added, removed or altered commitments or change of intent.

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	training, exercises, drills, and review and updating of the Emergency Plan and EPIPs. The Site Director may designate personnel to assist in meeting this responsibility.		
351.	2.2 Manager Nuclear Assurance & Assessment The Manager - Nuclear Assurance & Assessment with the Manager Emergency Preparedness will arrange for independent reviews of the emergency preparedness program annually. The results of the review will be documented, reported to the Site Director, and retained for a period of at least five years.	[CEP — P-9] Emergency preparedness program elements are reviewed by persons that have no direct responsibility for the implementation of the emergency preparedness program, in accordance with 10 CFR 50.54(t).	Editorial  No added, removed or altered commitments or change of intent.
352.	2.3 Nuclear Plant Managers Each manager is responsible for ensuring that personnel in his/her department receive the appropriate training and indoctrination on the Emergency Plan and EPIPs.		Non-RIE  Manages action controlled by policies and procedures outside the Emergency Plan as directed by the CNO
353.	2.4 Manager Emergency Preparedness The Manager Emergency Preparedness is responsible for the overall emergency planning efforts and verifying that all emergency preparedness (10 CFR 50) requirements are maintained, including NextEra Energy Point Beach ERO training, to assure operability of NextEra Energy Point Beach. The Manager Emergency Preparedness will receive appropriate guidance from the Site Director. The Manager Emergency Preparedness may designate other personnel to assist in meeting this responsibility.	[CEP — P-3] The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations.	Editorial Title change No added, removed or altered commitments or change of intent.
354.	<ul> <li>3.0 ORGANIZATIONAL PREPAREDNESS</li> <li>3.1 Training Corporate and Plant Personnel</li> <li>3.1.1 Personnel with unescorted access to NextEra Energy Point Beach:</li> <li>a. Personnel with unescorted access will be indoctrinated on the Emergency Plan and Emergency Plan Implementing Procedures (EPIP) through the general access training program. This training program has provisions for immediate indoctrination of new employees. Thereafter, all personnel with unescorted access meet this commitment during annual plant access</li> </ul>		Potential-RIE 6-1 Refer to assessment Section 3.1 for the disposition of this item.

**Current Emergency Plan Common Emergency Plan and Site Annex Change Type** qualification renewal. b. Personnel with unescorted access shall receive, as a minimum, instructions in the following topics: Emergency alarms and their meanings Emergency assembly areas Precautions and limitations during emergencies Reasons for emergency plans Worker responsibilities during emergencies Personnel assigned to the NextEra Energy [CEP - 0.1] Non-RIE Point Beach Emergency Response Organization Initial training and continuing ERO training is The CEP and Annexes are (ERO). conducted to ensure ERO personnel are properly formatted in a 50.47(b) outline. Personnel assigned specific duties qualified to their specific position. Wording altered to address the associated with the Emergency Plan will receive initial [CEP-0.2] level of detail of the NUREG-0654 and annual continuing training specific to the The ERO training program is developed and R2 element and fleet description. response role they are assigned, in accordance with evaluated based on position-specific Previous annual retraining the Emergency Plan Training Program. responsibilities/tasks using Systems Approach to requirement now determined on a b. The objectives of initial and continuing training are Training (SAT) principles, when applicable. task basis using SAT practices. to: Program responsibilities Prepare the ERO in the areas of emergency documented in Section P. plan organization, facility organization, accident classification, emergency data analysis and problem solving. Keep personnel in the ERO informed of substantive changes in the Emergency Plan procedures. Maintain a high degree of preparedness at all levels of the Emergency Response Organization. The Emergency Preparedness Training Program provides for annual continuing training using a systematic approach on portions of the Emergency Plan and Emergency Plan Implementing Procedures that affect the trainee's role in the Emergency Response Organization. Specific continuing training requirements include: 1. The Shift Manager, Emergency Classification ICEP - 0.11 **Editorial** 356. Advisor, and Shift Technical Advisor will receive Initial training and continuing ERO training is No added, removed or altered specialized training in accident assessment. The conducted to ensure ERO personnel are properly commitments or change of intent. following are general topics that will be included qualified to their specific position. Categories of in this annual training: personnel requiring training include: Accident assessment and classification (a) Emergency Directors (includes the aspect of

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	(b) Dose projections (c) Protective action recommendations (d) Notification of offsite agencies	classification, notification and PARs)	
357.	<ul> <li>2. Radiological Reentry Teams (Chemistry and Radiation Protection) will receive training in the actions they will be expected to perform during an emergency. The following general topics will be included in the training: <ul> <li>(a) Personnel monitoring (reentry and medical assistance)</li> <li>(b) Emergency exposure criteria</li> <li>(c) Locations and use of radiological emergency equipment</li> <li>(d) Post accident sampling</li> </ul> </li> </ul>	<ul> <li>[CEP - 0.1]</li> <li>Initial training and continuing ERO training is conducted to ensure ERO personnel are properly qualified to their specific position. Categories of personnel requiring training include:</li> <li>Radiation Protection and Monitoring</li> <li>ERO RPT position is qualified to ANSI technician standards.</li> <li>ERO RP Qualified Individual position is task qualified to perform the following:         <ul> <li>Provide RP coverage for accessing known radiological environments (which includes respirator qualifications)</li> <li>Control dosimetry and RCA access</li> <li>Provide in-plant surveys</li> </ul> </li> <li>ERO Field Monitoring Team Technicians receive initial training for the tasks they will be expected to perform during an emergency. The following general topics will be included in the training:         <ul> <li>Equipment and equipment checks</li> <li>Communications</li> <li>Plume tracking techniques</li> <li>Personnel monitoring</li> <li>Emergency exposure criteria</li> <li>Locations and use of radiological emergency equipment</li> </ul> </li></ul>	Editorial  No added, removed or altered commitments or change of intent.
358.	Training of individuals assigned to repair and damage control teams (reentry teams) will be conducted annually.	[CEP – 0.1] Initial training and continuing ERO training is conducted to ensure ERO personnel are properly	Editorial  No added, removed or altered commitments or change of intent.
	<ul> <li>a. Individuals assigned to search and rescue teams shall maintain qualifications to meet the requirements of the supporting agency providing first aid and CPR training.</li> <li>b. Individuals assigned to Fire Brigade shall maintain fire brigade qualifications as implemented by the Fire Protection Program Design Document.</li> </ul>	qualified to their specific position. Categories of personnel requiring training include:	Sommand of Grange of Interne

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	c Security Personnel will maintain qualifications as implemented by the Security Plan.	assigned to repair and damage control teams are trained as part of their normal job-specific duties to respond to both normal and abnormal plant conditions and work under direction of an ERO supervisor in the OSC.	
359.	3.1.3 The conduct of all emergency response training will be critiqued and documented on appropriate Training forms.	[CEP – O.2.b] All individuals participating in the ERO training program are given the opportunity to provide feedback of training sessions. Any weak or deficient areas identified and corrected.	Editorial  No added, removed or altered commitments or change of intent.
360.	3.1.4 Emergency Preparedness Staff Emergency Preparedness Staff will maintain familiarity with state of the art emergency preparedness equipment and procedures on an annual basis by attending seminars, workshops, and training as appropriate.	[CEP – P.1] Initial EP program training for new EP staff members is performed and documented. Retraining of EP staff members is performed periodically through job related opportunities (such as courses, workshops, information exchange meetings with other licensees, conferences held by industry and government agencies, etc.) to maintain current knowledge of the overall planning effort or to enhance working knowledge of plant operations.	Editorial  No added, removed or altered commitments or change of intent.
	3.2 Training Offsite A training opportunity will be provided annually for offsite organizations and agencies as specified in respective agreements and understandings. In addition, those offsite organizations and agencies that may provide onsite emergency assistance will be encouraged to become familiar with the general layout of NextEra Energy Point Beach facilities as it relates to their responsibilities, and will be invited to attend appropriate Emergency Preparedness training and orientation courses conducted. Training for specific offsite organizations and agencies will be provided as follows:  3.2.1 A training opportunity on an annual basis for hospital personnel, ambulance/rescue personnel, police, and fire departments. The training shall include the procedures for notification, basic radiation protection, and the organization's expected role.	[CEP—O.1.a]  NextEra offers emergency response training annually to local support organizations. Training includes basic radiation protection, the notification process for their organization, and their organization's expected role. The offered training for local support organizations who will enter the site also includes the general site layout, site access procedures, and the identity (by position and title) of the onsite individual who will control their support activities.	Editorial No added, removed or altered commitments or change of intent
362.	3.2.2 Training media on an annual basis for the	[CEP – G-5]	Editorial

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	general population in the Emergency Planning Zone (EPZ).  This training program will include the following:  a. Educational material concerning radiation.  b. Identification of a contact point for further information.  c. Protective actions that can be taken for any radiological emergency. These actions would range from simple sheltering and respiratory protection to the more complex and serious steps such as evacuation.  3.2.3 Local news media personnel will be provided an opportunity annually to become more familiar with information pertaining to radiological emergency planning, nuclear power generation, NextEra Energy Point Beach, radiation, and points of contact for release of public information in an emergency.	The news media will be provided materials to acquaint them with emergency planning effort at the NextEra specific site(s) annually.  Typical content includes site information, information concerning radiation, emergency planning, and points of contact for release of information to the media during an emergency.	No added, removed or altered commitments or change of intent.
363.	NextEra Energy Point Beach conducts a biennial exercise and additional periodic drills. A drill in this context is a supervised instruction period aimed at testing, developing, and maintaining skills in a particular operation. It is often a component of an exercise, which is an event that tests the integrated capability, and a major portion of the basic elements existing within emergency preparedness plans and organizations.  Each drill or exercise is conducted to ensure that the participants are familiar with their duties and responsibilities, to verify the adequacy of and methods used in EPIPs and other emergency procedures, to check the availability of emergency supplies and equipment, and to verify the operability of emergency equipment.	<ul> <li>[CEP N.2.a]</li> <li>Each NextEra site will conduct a plume exposure pathway exercise biennially. Specifically, the plume exposure pathway exercise is developed to provide the ERO with the opportunity to demonstrate proficiency in the principal functional areas of emergency response: <ul> <li>Management and coordination of emergency response</li> <li>Accident assessment</li> <li>Event classification</li> <li>Notification of the OROs</li> <li>Assessment of the onsite and offsite impact of radiological release</li> <li>PAR development (required only in exercises that include a GE)</li> <li>Protective action decision-making (onsite protective actions)</li> <li>Plant system repair and mitigative action implementation</li> </ul> </li></ul>	Editorial  No added, removed or altered commitments or change of intent.
364.	The Manager Emergency Preparedness is responsible for planning, scheduling, and coordinating all Emergency Plan drills and exercises.	[CEP—P.3] The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and	Editorial Title Change No added, removed or altered

**Common Emergency Plan and Site Annex** 

**Change Type** 

**Current Emergency Plan** 

	Current Emergency i lan	Common Emergency Flam and Site Armex	Onange Type
	All Emergency Plan drills and exercises are subject to the approval of the Site Director. The Site Director will assign personnel to correct any deficiencies identified during the conduct of drills or exercises.  When a major drill or exercise is required, the Manager Emergency Preparedness will:  • Develop and prepare a scenario. This scenario shall include, but not be limited to, the basic objective(s) of the drill or exercise; the date(s), time period, place(s) and participating organizations; the simulated events; a timeline of real and simulated initiating events; a narrative summary describing the conduct of the drill or exercise; and arrangements for qualified controllers.  • Coordinate efforts with other appropriate emergency organizations and agencies.  • Schedule a date to conduct the drill or exercise and assign qualified controllers.  • Obtain the approval of the Site Director if the drill or exercise involves more than one plant group.  • Critique the results of the drill or exercise.  Retain critique results for review prior to future drills or exercises and guidance in developing Emergency Plan, EPIPs, EPMPs, or generic position guidance as appropriate.	updating of the emergency plan, as well as the coordination of the plan with other response organizations. [CEP N.1.a] Critiques of each drill and exercise will be held following each event to evaluate areas and identify issues. The critique is performed following the conclusion of a drill or exercise using preselected drill and exercise performance objectives. Provisions are made for federal and ORO representatives to observe and participate in drill and exercise critiques when present. A written report is prepared following a critique to document whether the objectives were successfully demonstrated.	commitments or change of intent.
365.	3.3.1 Exercises NextEra Energy Point Beach conducts an emergency response exercise to demonstrate the effectiveness	[CEP – N-1] Exercise: An exercise is an event that tests the integrated capability and a major portion of the	Editorial  No added, removed or altered commitments or change of intent.
	of the Emergency Plan on a frequency determined by the NRC. Exercises may include mobilization of state and local personnel and resources, and are intended to verify their capability to respond to an accident. Joint exercises shall be conducted on a frequency described in NRC/FEMA guidance. NextEra Energy Point Beach will invite qualified observers from federal, state, and local governments to observe and critique the exercises. A critique shall be conducted following the exercise to evaluate the ability of organizations to respond as required in the	<ul> <li>Over the period of the exercise cycle, exercises will test the adequacy of timing and content of implementing procedures and methods, test emergency equipment and communications networks, test the public alert and notification system, and ensure that emergency organization personnel are familiar with their duties.</li> <li>Exercises must provide the opportunity for the ERO to demonstrate proficiency in the key skills</li> </ul>	

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	Emergency Plan. The critique will be conducted as soon as practicable after the exercise.	<ul> <li>necessary to implement the principal functional areas (see N.4) of emergency response.</li> <li>State and local agencies within the plume exposure pathway EPZ are provided the opportunity to participate by invitation as described in Element N.2.a.</li> <li>[CEP – N-1.a]</li> <li>Critiques of each drill and exercise will be held following each event to evaluate areas and identify issues. The critique is performed following the conclusion of a drill or exercise using preselected drill</li> </ul>	
200	The appropriate for drille and exercises will be veried	and exercise performance objectives.	Editorial
366.	The scenarios for drills and exercises will be varied such that all major elements of the emergency response plans and preparedness organizations are tested within an eight year period.	[CEP – N-3] Section lists various exercises that will be conducted in an eight year period [CEP – N-] Section lists various drills that will be conducted in an at various intervals during an eight year period	Editorial  No added, removed or altered commitments or change of intent.
367.	3.3.2 Drills and Testing Drills are conducted which involve appropriate offsite and on site emergency organizations. These drills are conducted by simulating actual emergency conditions. Drills are evaluated by an assigned monitor. Drills that will be conducted and their frequency include:	<ul> <li>[CEP - N-1]</li> <li>Drill: A drill is aimed at testing, developing and maintaining skills in one or more emergency plan functions.</li> <li>Drill types may be operational or discussion-based events (e.g., single ERF or tabletop drills). Drills may be a component of an exercise.</li> <li>During drills; activation of all of the ERFs is not required, supervised instruction is permitted, participants may be given the opportunity to resolve problems (success paths), and focus may be primarily on onsite training objectives. Drills may include evaluation of specific performance objectives or be conducted for non-evaluated training only.</li> </ul>	Editorial No added, removed or altered commitments or change of intent.
368.	a. Communications Drills Communications with federal, state, and local governments within the plume exposure pathway EPZ are tested monthly. Communications between NextEra Energy Point Beach and the NRC Operations Center are tested at least once each month from the Control Room, the TSC and the EOF.	[CEP – N.4.f] Each NextEra site will conduct communications drills once per calendar year. Communications tests described in Element F.3 can be performed as drills provided they include the aspect of understanding the content of messages.	Editorial No added, removed or altered commitments or change of intent.

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	Communications between NextEra Energy Point	[CEP – F.3]		
	Beach, state and local emergency operations centers,	Communication systems te		
	and field monitoring teams are tested annually.	accordance with Table F-1.		
		Table F-1: Communicatio	n System Testing	
		Requirements		
		Communication System ORO Notification System	Testing Requirement  Monthly (a)	
		NRC FTS (ENS) Network	Monthly (b)	
		ERDS ERO Notification System	Verify Transmission Quarterly Per Elements N.4.h and N.4.i	
		Field Monitoring Teams Communication	Annually (a)	
		Telephone System Station Radio System	Frequent Use (o) Frequent Use (o)	
		Station PA System ANS	Frequent Use (c) per site specific ANS Design Report	
		(a) Test credit may be given by successful use in a	drill.	
		<ul> <li>(b) NRC ENS in the Control Room is Frequent Use.</li> <li>(c) Communication systems that are listed with a tes</li> </ul>		
			cient high regularity, such that separate additional	
	F: 5 ''	testing is not needed.		
369.	b. Fire Drills			Non-RIE
	Fire drills are conducted periodically as implemented			Fire drills are controlled by the Fire
	by the NextEra Energy Point Beach Fire Protection			Protection Program.
	Program Design Document. The Fire Protection			
	Coordinator will coordinate all fire drills with offsite			
	agencies as necessary.			
370.	c. Medical Emergency Drills	[CEP – N.4.e]		Potential-RIE 6-2
	A medical emergency drill involving a simulated	Each NextEra site will cond	luct an onsite simulated	Refer to assessment Section 3.2 for
	contaminated individual and containing provisions for	medical drill once per calen	ndar year.	the disposition of this item.
	participation by the Aurora Medical Center Manitowoc	The scope of the emergence	cy medical drill will include	
	County is conducted every two years. The offsite	a simulated on-site injured		
	portions of this drill may be performed as part of the	individual and medical/ first		
	annual exercise. Since the Kewaunee Power Station	contamination control.		
	(KPS) will also be conducting drills with the hospital	Emergency Medical Drill of	feite participation and	
	on a biennial basis, the hospital and a local	periodicity for support Hosp		
	ambulance service will participate in drills annually.	services are performed in a		
		CFR 482.15 regulations an		
		scope of the station medica		
051	d Dedictories Manifester Dulle (D.4)		ai ui iii5.	Editorial
371.	d. Radiological Monitoring Drills (B-1)	[CEP – N.4.d]		Editorial
	Plant environs and radiological monitoring drills	Each NextEra site will cond		No added, removed or altered
	(onsite and offsite) shall be conducted annually.	monitoring drill once per ca		commitments or change of intent.
	These drills shall include collection and analysis of all	The scope of the environme	ental monitoring drill will	
	sample media (e.g., water, vegetation, soil and air),	include performance object	tives for direct radiation	
	and provisions for communications and record	measurements in the enviro		
	keeping.	analysis of sample media (	•	
		soil, and air), communication		
		joon, and an j, commanication	, a.i.a rooora kooping.	

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372.	e. Health Physics Drills (B-2) Health Physics drills shall be conducted semi- annually which involve response to, and analysis of, simulated elevated airborne and liquid samples and direct radiation measurements in the environment.	[CEP – N.4.d] Each NextEra site will conduct an environmental monitoring drill once per calendar year. The scope of the environmental monitoring drill will include performance objectives for direct radiation measurements in the environment, collection and analysis of sample media (e.g., water, vegetation, soil, and air), communications, and record keeping.	Non-RIE NUREG 0654 R2, Radiological Monitoring Drills with the Health Physics drills with a annual frequency.
373.	f. Chemistry Drills In plant post accident liquid sampling drills shall be conducted annually on each unit. Containment atmosphere sampling drills will be conducted each fuel cycle of each unit.	[PBN Annex – N.4.g] Not applicable: PBN has received NRC approval for the elimination of post-accident sample system (PASS) requirements from technical specifications. In accordance with their site specific NRC safety evaluation, contingency plans have been developed for obtaining and analyzing highly radioactive samples; however, these contingency plans do not have to be carried out in emergency plan drills or exercises.	Non-RIE As part of PASS elimination procedures developed to perform Core Damage Assessment that do not depend on early phase chemistry sampling.
374.	g. Site Assembly, Accountability, and Evacuation Drills A site assembly drill is conducted annually to assure that all personnel are aware of assembly areas. Accountability is implemented to ensure all personnel have been accounted for onsite. A release or evacuation of non ERO personnel may also be conducted as a part of the drill.		Potential-RIE 6-3 Refer to assessment Section 3.3 for the disposition of this item.
375.		<ul> <li>[CEP - N.4.j]</li> <li>Each NextEra site will conduct a protective action drill within an eight-year cycle.</li> <li>The scope of the protective action drill will demonstrate the ability to implement and coordinate protective actions for onsite personnel during a hostile action using one or more of the following:         <ul> <li>Warning personnel in the OCA outside the protected area</li> <li>Evacuation of personnel from target buildings, including security personnel</li> <li>Site evacuation by opening (while continuing to defend) security gates (demonstrated through discussion/table-top)</li> </ul> </li> </ul>	Non-RIE Added drill requirement

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		<ul> <li>Dispersal of licensed operators</li> <li>Sheltering of personnel in structures away from potential site targets</li> <li>Arrangements for accounting for personnel after the attack</li> </ul>	
376.	h. Shift Augmentation Drills Shift augmentation drills will be conducted annually.	[CEP – N.4.h] Each NextEra site will conduct an off-hours unannounced ERO report-in drill at least once within an eight-year cycle. The scope of the off-hours unannounced ERO report-in drill will require actual response to the assigned facility. The Off-Hours Report-In Drill requirement may be satisfied by an actual event provided objectives are evaluated and documented in a critique report. [CEP – N.4.i] The NextEra ERO notification is an all-call process. Each NextEra site will conduct an off-hours unannounced ERO call-in drill biennially to verify each minimum staffing ERO position meets the required Table B-1 response time. The scope of the off-hours unannounced ERO call-in drill will require collection of the ERO notification system report which documents response within the required time. Completion of an Element N.4.h off-hours unannounced ERO report-in drill satisfies the requirements of the off-hours unannounced ERO call-in drill in this element. The Off-Hours Call-In Drill requirement may be satisfied by an actual event provided the objectives	Potential-RIE 6-4 Refer to assessment Section 3.4 for the disposition of this item.
377.	i. Off Hours Drills Off hours drills will be conducted once every eight years between 6:00 p.m. and 4:00 a.m.	are evaluated and documented in a critique report.  [CEP – N.1.c]  Each NextEra site will conduct at least one off-hours drill or exercise within an eight-year exercise cycle. An off-hours drill or exercise is established as any time of day on a weekday holiday, or any time of day on a weekend day, or between the hours of 6:00 p.m. and 4:00 a.m. on a normal workday.	Editorial Added clarification of requirements for conduct of drill. No added, removed or altered commitments or change of intent.

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		The off-hours drill requirement may be satisfied by an actual event provided it meets the above off-hours criteria and the objectives are evaluated and documented in a critique report for the augmentation of the ERO, the transfer of responsibilities, and facility activation.	
378.		[CEP – N.4.I] Each NextEra site will conduct an aircraft threat/attack response drill at least once within an eight-year cycle. This drill may be combined with the beyond design basis demonstration in Element N.3.e.	Non-RIE Added drill requirement.
379.		[CEP – N.4.I] Each NextEra site will conduct a minimum staffing drill at least once within an eight-year cycle. A minimum staffing response drill requires facility activation, full transfer of responsibilities from the Control Room, and demonstration of event assessment and response activities.	Non-RIE Added drill requirement.
380.		[CEP – N.4.m] Each NextEra site will conduct an ERO on-shift response drill at least once within an eight-year cycle. An on-shift response drill requires demonstration of classification, notification and PAR functions with minimum shift staffing (no support from augmenting ERO personnel no sooner than 90 minutes after event declaration) using an Onshift Staffing Analysis event modified to support the objectives.	Non-RIE Added drill requirement.
381.	4.0 REVIEW AND UPDATING OF THE PLAN, PROCEDURES AND LETTERS OF AGREEMENT The Emergency Plan and EPIPs will be reviewed on an annual basis and updated as necessary. Updates will take into account needed changes identified by drills and exercises. Management controls will be implemented for evaluation and correction of review findings. The Site Director is responsible for coordinating these efforts. The Site Director is also responsible for coordinating the review and updating of the EPMPs. This includes a quarterly review of emergency telephone lists.	[CEP – F.3] Communication systems testing is accomplished in accordance with Table F-1. Table F-1: Communication System Testing Requirements Communication System Testing Requirement ORO Notification System Monthly (a) NRC FTS (ENS) Network Monthly (b) ERDS Verify Transmission Quarterly ERO Notification System Per Elements N.4.h and N.4.i	Potential-RIE 6-5 Refer to assessment Section 3.5 for the disposition of this item.

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	The Manager Nuclear Assurance & Assessment is	Field Monitoring Teams Communication Annually (a)	
	responsible with the Manager Emergency	Telephone System Frequent Use (c)	
	Preparedness for arranging with the Nuclear	Station Radio System Frequent Use (c)	
	Assurance Section for an annual review of the	Station PA System Frequent Use (c)	
	Emergency Preparedness Program.	ANS per site specific ANS Design Report	
	Letters of agreement between NextEra Energy Point	(a) Test credit may be given by successful use in a	
	Beach and outside organizations and agencies will be	drill.	
	reviewed annually and renewed if required.	(b) NRC ENS in the Control Room is Frequent Use.	
		TSC and EOF require monthly testing.	
		(c) Communication systems that are listed with a	
		testing frequency of "Frequent Use" indicate that	
		the associated equipment is normally used at a	
		sufficient high regularity, such that separate	
		additional testing is not needed.	
		[CEP – N.4.i]	
		The NextEra ERO notification is an all-call process.	
		Each NextEra site will conduct an off-hours	
		unannounced ERO call-in drill biennially to verify	
		each minimum staffing ERO position meets the	
		required Table B-1 response time.	
		The scope of the off-hours unannounced ERO call-in	
		drill will require collection of the ERO notification	
		system report which documents response within the required time.	
		Completion of an Element N.4.h off-hours	
		unannounced ERO report-in drill satisfies the	
		requirements of the off-hours unannounced ERO call-	
		in drill in this element.	
		The Off-Hours Call-In Drill requirement may be	
		satisfied by an actual event provided the objectives	
		are evaluated and documented in a critique	
		report.[CEP - P.4]	
		The formal emergency plan (as defined in the	
		introduction section) and the emergency plan	
		implementing procedures (as defined in Section P.7)	
		will be reviewed on an annual basis and updated if	
		necessary. Any changes to regulations, issues	
		identified by drills and exercises, assessments and	
		audits, or other updates will be evaluated and	
		incorporated into the emergency plan if warranted.	

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382.	5.0 EMERGENCY EQUIPMENT AND SUPPLIES The Manager Radiation Protection has overall responsibilities for the inventory and inspection of designated emergency equipment and supplies exclusive of fire protection equipment. The Fire Protection Coordinator has overall responsibilities for the fire protection equipment. He may, however, assign personnel to assist him with this responsibility. Designated non fire emergency equipment and supplies and their location are referenced in the Emergency Plan Maintenance Procedures. This equipment is inventoried, inspected, and calibrated at a frequency in accordance with the Emergency Plan Maintenance Procedures (EPMPs). Inventories are completed at least once each calendar quarter and after each use. Inspection, calibration and maintenance are accomplished at a frequency recommended by the manufacturer of the equipment. Portable radiation monitoring equipment included in these inventories is calibrated in accordance with approved procedures. Reserve instruments and equipment will replace those which are removed from emergency kits for calibration or repair in accordance with the guidelines of the EPMPs. Equipment,	Letters of Agreement will be reviewed and verified on an annual basis, and updated if warranted. Changes will be processed in accordance with 10 CFR 50.54(q) requirements and NextEra document control/records management procedures. [CEP – P.10] The NextEra emergency communications directory contains select contact numbers for ORO and support organizations identified in the emergency plan and implementing procedures. The ERO call-out system contains comprehensive ERO contact information. NextEra ERO contact information is verified semi-annually and updated as needed. Facility and support contact information in the emergency communications directory is verified annually and updated as needed.	

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	supplies, and parts having finite shelf lives will be		
	checked and replaced as necessary. Any deficiencies		
	found will either be cleared immediately or		
	documented for corrective action.		
	12. Section EP 9.0, Recovery, R44		
383.	1.0 DISCUSSION	[CEP—M]	Non-RIE
	Outlined in EP 5.0, Organizational Control of	General plans for recovery and reentry are	Removed discussion
	Emergencies, are those preplanned actions to be	developed.	Revised introductory wording to
	taken in the event that an emergency situation arises.	'	reflect Planning Standard and align
	After execution of these preplanned actions, there will		to NUREG-0654 R2 format.
	be need for further plant actions. Depending on the		
	nature of the particular situation, recovery procedures		
	shall be developed for restoring operations and		
	property as nearly as possible to a safe status. The		
	less severe classifications, such as an Unusual Event		
	or Alert, require only brief recovery action procedures.		
	However, for the Site Area and General		
	Emergencies, correspondingly complex recovery		
	action procedures may be required. Although it is not		
	practicable to plan detailed recovery actions for all		
	conceivable situations, the following general		
	guidelines will assist in determining the specific		
	actions to be taken:		
384.	1.1 All recovery actions will be preplanned. This		Non-RIE
	means that each specific action will be thought out in		Normal station procedure will apply
	advance and discussed with responsible and		after recovery is entered. These
	knowledgeable personnel. If conditions permit, it is		procedure require preplanning of all
	preferred that there be a written log of all actions to		activities.
	be taken and by whom.		
385.	1.2 Affected areas will be roped off and posted		Non-RIE
	with warning signs indicating radiation levels and		Normal or special procedures
	permissible entry times based on survey results.		developed by and approved by
	Shielding will be employed to the extent practical.		Radiation Protection Department
	Access to such areas will be controlled, and		will be used to control radiation
	exposures to personnel entering such areas will be		work in the recovery phase.
	documented.		
386.	1.3 Every reasonable effort should be made to		Non-RIE
	limit radiation exposure of personnel involved in the		Normal or special procedures
	recovery situation to levels as low as reasonably		developed by, and approved by
	achievable. Exposures should not exceed 10 CFR 20		Radiation Protection Department
	limits.		will be used to control radiation

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			work in the recovery phase. The PBN RP Department adheres to ALARA principles.
387.	1.4 The Emergency Coordinator is responsible for evaluating the advisability and timing of authorizing personnel to reenter affected area(s). An RWP (or equivalent) will be used to control access during recovery operations. Survey results and all other pertinent information will be collected from logs and other records or indicators in the Control Room, Technical Support Center, and/or in the Emergency Operations Facility. Individuals with direct knowledge of recent conditions in the affected area(s) will be interviewed.	[CEP – K.1.b] Emergency worker exposure is monitored at the time of exposure by the use of electronic dosimeters. If direct measurement of airborne concentrations is not available at time of exposure, workers will be provided respiratory protection, when feasible, and total exposures will be calculated after the fact using follow up survey data and whole body counting equipment.  [CEP – K.2.a] All personnel dispatched into radiation areas or areas of unknown radiation levels are briefed on the task and environmental conditions and are provided appropriate monitoring and personnel protective equipment.  [CEP – M.1.a] Reentry can occur during the plume or post-plume phase and refers to the temporary movement of people into an area of actual or potential hazard. Personnel who have been evacuated or relocated from a restricted area may be allowed to reenter under controlled conditions to perform additional emergency response activities.  Reentry into the OCA will be based on site conditions. During or following a HAB incident, reentry criteria take into consideration site security and threat conditions.	Non-RIE CEP separates entries made during emergency phase of event from those planned in the Recovery Phase. During the Recovery Phase normal or special procedures developed by, and approved by Radiation Protection Department will be used to control radiation work in the recovery phase.  The PBN RP Department adheres to ALARA principles.
388.	1.5 The Emergency Coordinator is responsible for designating an Incident Investigation Team. The Incident Investigation Team is responsible for gathering all available evidence on contributory factors and reviewing the recovery operations to ensure that all causal factors have been specifically identified and all abnormal conditions corrected or neutralized. In addition, this team will review recommendations from the Emergency Director where a release of radioactive material has occurred		Non-RIE Investigation of any adverse event, emergency or non-emergency is conducted under the Corrective Action Program, which include several layers of reviews and specific procedures on how investigations are performed.

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	and consult with those offsite authorities with		
	regulatory or compliance responsibilities.		
389.	1.6 Recovery operations may be terminated when all appropriate actions have been completed, and the NextEra Energy Point Beach Recovery Organization, under the direction of the Emergency Director, offsite authorities, and NRC agree it is appropriate to terminate.	ICEP - M.3  Steps will be taken to terminate from the event, either directly or following a transition period (prior to entering a state of recovery operations). Usually, the Unusual Event and Alert classification levels will be directly terminated (no entry into recovery). Items that must be considered before terminating the emergency condition to either a normal or a recovery organization are as follows:  • Emergency Action Level criteria  • Releases of radioactive materials to the environment  • In-plant radiation levels  • Plant stable and long term core cooling available  • Containment integrity  • Functionality and integrity of plant systems, facilities, power supplies, equipment, and instrumentation  • Fire, flood, earthquake or similar hazardous emergency conditions  • Security issues  • Site access not limited for personnel and support services  Decisions to relax protective actions for the public will be made by the appropriate state authorities.  When transition from an emergency to a recovery phase is necessary, the Emergency Director will designate a Recovery Manager and develop a recovery organization.  The Emergency Director will inform the ERO, OROs, and NRC upon exiting the state of emergency and either returning to normal organizational control or	Non-RIE Current plan term "recovery operations" refers to actions taken by the ERO, while event is declared, to recover the plant to a safe condition.  New wording addresses terminating the event (ECL) and entering a post event Recovery Phase.  No added, removed or altered commitments or change of intent.
202	O O DECOVEDY ODG ANIZATION	entering recovery.	N. DIE
390.	2.0 RECOVERY ORGANIZATION In those cases where post-accident conditions	[CEP – M.2]	Non-RIE
	indicate that recovery operations will be either complicated or will extend over a relatively long	The recovery activities would be managed much like a normal outage, except that certain activities unique	CEP implements Recovery Organization base on event. Most

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
n	period of time, the plant operations will shift from the Emergency Response Organization to a long term Recovery Organization. The recovery organizational structure may be the same as the Emergency Response Organization with additional modifications depending upon the nature of the accident, post-accident conditions (e.g., plant conditions, radiation/contamination levels, etc.), and other factors to be determined at that time. The advantage for adopting this transitional approach is for continuity (e.g., managers and directors know the problem areas) and lack of confusion among plant personnel and federal, state and local support agencies. Prior to initiating a long term recovery organization, specific recovery operational procedures shall be defined. A typical long term recovery organization may be designed as follows: Incident Investigation Team In addition to the recovery organization, the Emergency Coordinator shall establish an Incident Investigation Team.  The team, responsible for gathering evidence on contributory factors and reviewing recovery operations is an interdisciplinary team which reports to the Emergency Coordinator. It will normally consist of representatives from Operations, Maintenance, Engineering, and Radiation Protection, as determined by the Emergency Coordinator.	to the post-accident situation may be controlled by the recovery organization. The recovery organization would function as a matrix management organization to coordinate activities with the normal company organization. This organization may be located at the EOF or the site, as appropriate.  The primary positions in the recovery organization are described as follows:  Recovery Manager – Overall management of recovery activities. High level coordination with offsite agencies.  Onsite Recovery Coordinator – Directs the onsite recovery activities.  Offsite Recovery Coordinator – Directs interface with offsite agencies during the recovery.  Radiological Assessment Coordinator (if needed) – Coordinates radiological and environmental assessment with offsite agencies. Coordinates offsite radwaste management and decontamination activities.  Spokesperson – Directs the public information program during the recovery phase.	actions will be taken by the normal plan organization. Investigation of any adverse event, emergency or non-emergency is conducted under the Corrective Action Program, which include several layers of reviews and specific procedures on how investigations are performed.
	13. Appendices		
391.	Appendix A, Emergency Response Organization Personnel Function And Responsibility	See Analysis #1 and Analysis #2	Non-RIE Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
392.	Appendix B, Emergency Classification	The PBN Emergency Action Level (EAL) scheme is documented in EP-PBN-111, PBN EAL Technical Basis Manual.	Editorial Removed duplicate information from CEP. Information on Emergency Classification is contained in EAL

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
			Technical Basis Manual which is considered part of the Plan.
393.	Appendix C, Maps		Non-RIE Removed duplicate maps contained in ETE and procedure level information
394.	Appendix D, Letters of Agreement	See Section A.4 of CEP	Editorial Letters of agreement now listed in body of PBN Annex
395.	Appendix E, Wisconsin Emergency Plan		Non-RIE Removed ORO Plan. ORO Emergency Plans maintained by OROs
396.	Appendix F, Manitowoc County Emergency Operations Plan		Non-RIE Removed ORO Plan. ORO Emergency Plans maintained by OROs
397.	Appendix G, Kewaunee County Emergency Operations Plan		Non-RIE Removed ORO Plan. ORO Emergency Plans maintained by OROs
398.	Appendix H, Typical Equipment Lists		Non-RIE Removed lists of typical equipment. Plan commits to verifying adequate supplies are available. Actual lists will be procedure level content.
399.	Appendix I, List of EPIP Categories And Cross-References to the Emergency Plan	[CEP—P.7] Table P.7-1 provides a listing, by title, of the common response and maintenance procedures required to implement the emergency plan, and the section(s) of the emergency plan to be implemented by each procedure.  A listing, by title, of the site-specific response and maintenance procedures required to implement the emergency plan is provided in the site annexes.  [PBN Annex – P.7] Table P.7-1 provides a listing of the PBN site-specific procedures required to maintain and implement the emergency plan, and the section(s) of the emergency	Editorial Procedure list and reference to section of the plan implemented now contained is Section P of CEP and PBN Annex

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		plan implemented by each procedure.	
400.	Appendix J, Evacuation Time Estimates for the Area Surrounding NextEra Energy Point Beach	[PBN Annex – J.8.a] The PBN site specific ETE report is documented in EP-PBN-113, PBN Evacuation Time Estimate Study.	Editorial Removed duplicate information from CEP. ETE contained in separate document which is considered part of the Plan.
401.	Appendix K, NUREG-0654 Cross Reference Matrix	[CEP – P-8] The NextEra emergency plan contains a specific table of contents. The emergency plan paragraphs are numbered corresponding to the NUREG-0654/FEMA-REP-1 R2 evaluation criteria. Evaluation criteria which do not apply to utilities are listed and identified.	Editorial Removed 0654 cross reference. Plan formatted to match 0654 elements.
402.	Appendix L, Meteorological Monitoring System Design, Testing And Calibration		Non-RIE Remove details on Meteorological Monitoring System. System required and controlled by ODCM, Radiation Protection and UFSAR
403.	Appendix M, Matrix for Emergency Preparedness Equipment		Non-RIE Removed lists of typical equipment. Plan commits to verifying adequate supplies are available. Actual lists will be procedure level content.

## **ENCLOSURE 3**

### St. Lucie Nuclear Plant

# **Analysis Report #4**

**Current to Proposed Emergency Plan Comparison Analysis** 

(165 pages follow)





St. Lucie Nuclear Plant (PSL)

# Analysis Report #4 Current to Proposed Emergency Plan Comparison Analysis

09/21/22

#### 1 INTRODUCTION

This comparison analysis identifies the differences between the current emergency plan (Revision 70) and the proposed NextEra Common Emergency Plan (CEP) and PSL Emergency Plan Site Annex.

Differences between the content of current emergency plan and the proposed emergency plan were evaluated to determine whether any potential reductions in effectiveness were introduced by changes made.

#### 2 REVIEW METHODOLOGY

The comparison between the current emergency plan and the proposed emergency plan was made as follows:

- 1. The first step compares the content of the current emergency plan to the proposed emergency plan to determine whether there was any change. Comparisons where the wording is the same are identified as '**No Change**'.
- 2. Where a difference does exist between the wording of the two documents, it is evaluated as Editorial, No Reduction in Effectiveness or a Potential Reduction in Effectiveness. The definitions for the differences are as follows:
  - **Editorial** Differences that include typographical, formatting, paragraph numbering, spelling, grammar, punctuation, or title; or wording changes that do not alter intent of the original content or level of commitment.
  - No Reduction in Effectiveness (Non-RIE) Differences in intent or methods of
    performing a function that sustain or improve the licensee's capability to perform
    an emergency planning function in the event of a radiological emergency.
  - Potential Reduction in Effectiveness (Potential RIE) Differences that may
    result in reducing the licensee's capability to perform an emergency planning
    function in the event of a radiological emergency.

Potential RIEs were then further evaluated to determine if an actual RIE exists. All Potential RIEs are dispositioned in Section 2, Summary.

#### 3 SUMMARY

The results of the comparison between the current emergency plan and the proposed emergency plan revealed the following changes that could be considered reductions in effectiveness.

# 3.1 [Potential RIE 6-1] Row 280 – Reduced Hospital and Ambulance Drill Participation and Periodicity

#### **Current Emergency Plan**

[7.1.4.3 Medical Emergency Drill]

A medical emergency drill involving a simulated contaminated individual, with provisions for participation by local support services (i.e., ambulance and off-site medical treatment facility), will be conducted at least once every calendar year. Participation by local support services (i.e., ambulance and off-site medical treatment facility), may be tested separately or as part of the annual medical drill.

#### **Common Emergency Plan & Site Annex**

[CEP - N.4.a]

Each NextEra site will conduct an onsite simulated medical drill once per calendar year.

The scope of the emergency medical drill will include a simulated on-site injured and contaminated individual and medical/ first aid treatment, including contamination control. Emergency Medical Drill offsite participation and periodicity for support Hospital and Ambulance services are performed in accordance with the 42 CFR 482.15 regulations and are not included in the scope of the station medical drills.

#### Disposition

The hospitals are accredited by The Joint Commission in compliance with 42 CFR 482.15, Condition of Participation: Emergency Preparedness. The regulations and accreditation require the hospitals to maintain an emergency plan and that the emergency preparedness program include, but not be limited to, the following elements (excerpts from the 42 CFR 482.15 regulation):

- (a) Emergency plan. The hospital must develop and maintain an emergency preparedness plan that must be reviewed, and updated at least every 2 years. The plan must do the following:
  - (1) Be based on and include a documented, facility-based and community-based risk assessment, utilizing an all-hazards approach.
  - (2) Include strategies for addressing emergency events identified by the risk assessment.
  - (4) Include a process for cooperation and collaboration with local, tribal, regional, State, and Federal emergency preparedness officials' efforts to maintain an integrated response during a disaster or emergency situation.
- (b) Policies and procedures. The hospital must develop and implement emergency preparedness policies and procedures, based on the emergency plan set forth in paragraph (a) of this section, risk assessment at paragraph (a)(1) of this section, and the communication plan at paragraph (c) of this section. The policies and procedures must be reviewed and updated at least every 2 years.
- (d) Training and testing. The hospital must develop and maintain an emergency preparedness training and testing program that is based on the emergency plan set forth in paragraph (a) of this section, risk assessment at paragraph (a)(1) of this section, policies and procedures at paragraph (b) of this section, and the communication plan at paragraph (c) of this section. The training and testing program must be reviewed and updated at least every 2 years.
  - (1) Training program. The hospital must do all of the following:
    - (i) Initial training in emergency preparedness policies and procedures to all new and existing staff, individuals providing services under arrangement, and volunteers, consistent with their expected role.
    - (ii) Provide emergency preparedness training at least every 2 years.
    - (iii) Maintain documentation of the training.

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#### Disposition

- (iv) Demonstrate staff knowledge of emergency procedures.
- (v) If the emergency preparedness policies and procedures are significantly updated. the hospital must conduct training on the updated policies and procedures.
- (2) Testing. The hospital must conduct exercises to test the emergency plan at least twice per year. The hospital must do all of the following:
  - (i) Participate in an annual full-scale exercise that is community-based; or
    - (A) When a community-based exercise is not accessible, conduct an annual individual, facility-based functional exercise; or.
    - (B) If the hospital experiences an actual natural or man-made emergency that requires activation of the emergency plan, the hospital is exempt from engaging in its next required full-scale community-based exercise or individual, facilitybased functional exercise following the onset of the emergency event.
  - (ii) Conduct an additional annual exercise that may include, but is not limited to the following:
    - (A) A second full-scale exercise that is community-based or an individual, facilitybased functional exercise: or
    - (B) A mock disaster drill; or
    - (C) A tabletop exercise or workshop that is led by a facilitator and includes a group discussion, using a narrated, clinically-relevant emergency scenario and a set of problem statements, directed messages, or prepared questions designed to challenge an emergency plan.
  - (iii) Analyze the hospital's response to and maintain documentation of all drills, tabletop exercises, and emergency events, and revise the hospital's emergency plan, as needed.

Therefore, the hospitals use an all-hazards approach to determine the community-risk and priorities of its emergency response preparation (training, drills, etc.) on the risk / priority. Maintaining the Contaminated Medical Emergency Drill annual frequency, places a false priority /risk and circumvent the 42 CFR 482.15 community all-hazards regulations for the hospitals.

Ambulance services are under different regulations (primarily state regulations) but serves the same demographic and has similar community-risk and priority profile. Per the 42 CFR 482.15 regulation, the hospital's emergency plan includes cooperation and collaboration of local emergency preparedness officials and an annual full-scale community-based drill. CEP Section O.1.a, NextEra will continue to offer emergency response training annually to the ambulance service(s). Training includes basic radiation protection, the notification process for their organization, and their organization's expected role.

This change removes the requirement for hospital and ambulance participation in the annual emergency medical drill. The proposed CEP revision retains all other previous Offsite Response Organization (ORO) arrangements including offered annually training, offered participation in drills and pre-arrangements documented in Letters of Agreement (LOAs).

NextEra stations will continue to meet the requirements of 10 CFR 50.47(b)(14) and 10 CFR Part 50, Appendix E, Section IV.F.1. NextEra stations will continue to have arrangements with the OROs; annual training will be offered, and hospital participation in the emergency medical drill will be coordinated under 42 CFR 482.15 requirements. NextEra stations will participate in the hospital's community risk assessments to ensure the station's is properly risk evaluated and prioritized.

On-site emergency medical drill and training will be provided annually for the station's ERO. The training process/program will determine the need for additional on-site drills included in the training.

This drill participation arrangement was discussed with the OROs (hospitals and ambulance providers) and their concurrence is documented in Enclosure 10.

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#### Disposition

The 10 CFR Part 50 Appendix E and 10 CFR 50.47(b) regulations do not specify a frequency to perform the emergency medical drill. The annual frequency is specified in NUREG-0654 and provides the NRC approved guidance how to comply with the regulations. Licensees "may voluntarily use the guidance in the document to demonstrate compliance" with the NRC regulations or provide "methods or solutions that differ from those described." The alternate method of basing the drill frequency on the ORO community-risk assessment is appropriate and meets the intent of the planning standards.

The change to the emergency medical drill scope retains the annual requirement for the station while allowing the hospital and ambulance service the ability to participate under and within their regulatory requirements. This should provide a commitment which the NRC can evaluate as an acceptable alternate method to comply with 10 CFR Part 50 Appendix E and 10 CFR 50.47(b) regulations.

#### 3.2 [Potential RIE 6-2] Row 285 – Altered Annual Unannounced Communication Drills

#### **Current Emergency Plan**

#### 7. **Unannounced Drills**

At least one communications drill per year will be unannounced. This unannounced drill will include notification to all primary off-site response agencies (i.e. DEM, Department of Health, County Departments of Public Safety) and those FPL emergency response personnel required to be notified based upon the drill scenario. The unannounced communication drill could coincide with an exercise, or an actual Emergency Plan activation.

## **Common Emergency Plan & Site Annex**

[CEP -- N.1.d]

Each NextEra site will conduct at least one unannounced drill or exercise within an eightyear cycle.

The unannounced drill requirement may be satisfied by an actual event provided objectives are evaluated and documented in a critique report for the augmentation of the ERO, the transfer of responsibilities, and facility activation.

[CEP -- N.4.h]

Each NextEra site will conduct an off-hours unannounced ERO report-in drill at least once within an eight-year cycle.

The scope of the off-hours unannounced ERO report-in drill will require actual response to the assigned facility.

The Off-Hours Report-In Drill requirement may be satisfied by an actual event provided objectives are evaluated and documented in a critique report.

[CEP -- N.4.i]

The NextEra ERO notification is an all-call process. Each NextEra site will conduct an offhours unannounced ERO call-in drill biennially to verify each minimum staffing ERO position meets the required Table B-1 response time.

The scope of the off-hours unannounced ERO call-in drill will require collection of the ERO notification system report which documents response within the required time.

Completion of an Element N.4.h off-hours unannounced ERO report-in drill satisfies the requirements of the off-hours unannounced ERO call-in drill in this element.

The Off-Hours Call-In Drill requirement may be
satisfied by an actual event provided the
objectives are evaluated and documented in a
critique report

#### **Disposition**

1. Requirement for an annual unannounced communications drill with the ORO has been removed.

ORO warning points are staffed 24/7 with communications tests required monthly. ERO performance of ORO notification are now monitored under the ROP inspection process by the DEP performance indicator. Credited DEP notification is demonstrated on average more than 50x per year. No regulation, guidance or inspection procedure call for an annual unannounced communications drill with the ORO.

Restoring the scope and periodicity of communications drills and unannounced drills to consistency with the NUREG-0654 criteria does not impact the ability of the ERO or ORO to perform the notifications function, demonstrating full capability of the function.

2. Requirement for an annual unannounced communications drill with the ERO duty team has been changed to biennial.

NUREG-0654 R2 calls for quarterly off-hours call-in drills, such that each ERO member's normally expected response time is assessed at least biennially, with some drills being unannounced. The NextEra ERO notification is an all-call process, which for call-in drills will collect response time estimates from the entire ERO. This process validates all ERO members' response time each time it is used. The CEP drill criteria requires that the biennial ERO call in drill to be unannounced. This change aligns the CEP drill requirement with the intent of NUREG-0654 R2 criteria and provides a shorter periodicity for the testing of the full ERO notification process (annual team testing results in full testing every four years vs. every two years under the new criteria).

Adopting the NUREG-0654 R2 criteria for ERO call-in drills does not impact the ability of the ERO to perform the augmentation function.

## 3.3 [Potential RIE 6-3] Row 294 – Removed EP Initial Training of Non-ERO Personnel

## **Current Plan**

Response Organization (ERO) Personnel]
The Site Training Manager is responsible for the conduct and documentation of initial training and annual retraining programs for onsite FPL Emergency Response Organization (ERO) personnel. Specific training is specified in the following subsections. The site.

[7.2.2. Training of On-site Emergency

in the following subsections. The site.

Emergency Preparedness Manager is responsible for the content and accuracy of the Emergency Plan Training. Each new employee permanently assigned to work at the St. Lucie Plant shall be given initial orientation training. For employees not assigned specific responsibility or authority under the Emergency Plan or Emergency Plan Implementing Procedures (EPIPs), such training shall, at a minimum, provide information describing the action to be taken by an individual discovering an emergency condition, the location of assembly areas, the identification of emergency alarms, and the action to be taken

## **Proposed Common Plan**

[CEP -- 0.2.a]

Changes to the training program are identified from trainee feedback and by critique items captured during drills and incorporated per the principles of the SAT process.

[CEP -- O.2.b]

All individuals participating in the ERO training program are given the opportunity to provide feedback of training sessions. Any weak or deficient areas identified and corrected.

[CEP - P.3]

The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations.

upon hearing those alarms.

Training must be current to be maintained in the Emergency Response Organization (ERO). Emergency Plan Training records for Security personnel are maintained by the Site Training Manager.

#### **Disposition**

R1 and R2 of NUREG-0654 do not contain criteria requiring a description of training for non-ERO/non-essential personnel within the emergency plan). No regulation, other guidance document or inspection procedure calls for a description of non-ERO general employee training to be contained in the emergency plan.

General industrial safety information, which includes awareness and expectations to normal, offnormal and emergency situations is provided to all personnel given unescorted access onto the site. General employee training for unescorted site access includes topics of safety conscious work environment (SCWE), stormwater pollution prevention (SWPP), spill prevention and control, hearing conservation, emergency plan, and fire extinguishers and is presented in the NANTel Generic Awareness and NextEra site specific site access training courses.

Site specific general awareness training scope (industrial and emergency condition related) is governed and controlled outside the emergency plan.

Emergency plan awareness content review in general employee training by personnel knowledgeable of the emergency plan is provided in document controls processes and procedures. These processes and procedures are also applicable to changes to made by other non-EP departments that could potentially impact the emergency plan.

# 3.4 [Potential RIE 6-4] Row 308 – Reduced ERO Roster Review Periodicity from Quarterly to Semiannually

## **Current Emergency Plan**

Review of the Emergency Plan and **Emergency Plan Implementing Procedures** The Emergency Plan and Emergency Plan Implementing Procedures will be under continuing review by the site emergency planning group. A comprehensive review of the Emergency Plan will be conducted annually. The Emergency Plan Implementing Procedures are reviewed during drills, exercises, and actual emergencies and revised as necessary to correct identified deficiencies. The Emergency Plan Implementing Procedures will undergo a thorough formal review at least once every two years and be revised as necessary. Notification lists and rosters will be updated at least quarterly. If changes affecting emergency response are identified, these changes will be made as needed. The revised Emergency Plan will be distributed with the latest revision number indicated on each page. Revision indication along the right margin will be used to indicate where changes have been made. If during these annual reviews no changes are needed, this will be documented.

## **Common Emergency Plan & Site Annex**

[CEP -- P.3]

The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations.

[CEP -- P.4]

The formal emergency plan (as defined in the introduction section) and the emergency plan implementing procedures (as defined in Section P.7) will be reviewed on an annual basis and updated if necessary. Any changes to regulations, issues identified by drills and exercises, assessments and audits, or other updates will be evaluated and incorporated into the emergency plan if warranted.

Letters of Agreement will be reviewed and verified on an annual basis, and updated if warranted.

Changes will be processed in accordance with 10 CFR 50.54(q) requirements and NextEra document control/records management procedures.

[CEP - P.10]

The NextEra emergency communications directory contains select contact numbers for

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Current Emergency Plan	Common Emergency Plan & Site Annex
	ORO and support organizations identified in
	the emergency plan and implementing
	procedures. The ERO call-out system contains comprehensive ERO contact information.
	NextEra ERO contact information is verified semi-annually and updated as needed.
	Facility and support contact information in the emergency communications directory is
	verified annually and updated as needed.

#### **Disposition**

Due to the local relationships and the advancement of technology, the quarterly emergency telephone directory review is being changed to a semi-annual review. Historically, little change between guarters has occurred such that changing to a semi-annually review would have little impact on accuracy.

With cellular phones being the primary notification tool for ERO personnel, there is not nearly as many changes of phone numbers. In the past, if an individual moved their residence, their phone number likely did not travel with them as the numbers were tied to geographical regions within the city or town they were moving (land lines). With cell phones and changes to long distance billing, many people keep their same cell phone number as they move, whether across town or across country.

Most businesses or other support contacts that are listed in emergency telephone directory are established entities that do not change their business lines often enough to warrant a check every quarter. In addition, the internet is now the primary location to obtain business numbers. with these numbers readily available fewer numbers are required to be maintained in EP phone

#### 3.5 [Potential RIE 6-5] Row 321 – Reduced Emergency Equipment and Kit Inventories Periodicity from Quarterly to Semiannually

#### **Current Emergency Plan**

**Emergency Equipment Maintenance** All designated emergency equipment that is maintained in each Control Room, the TSC, OSC, EOF and the Site Assembly Station will be inventoried, operationally checked, and inspected at least once each calendar quarter and following each use.

#### **Common Emergency Plan & Site Annex**

[CEP -- H.11]

NextEra emergency equipment and kits are inventoried to verify adequate supplies and materials, inspect condition, and operationally check equipment/instruments semi-annually. Requirements to operationally check emergency equipment and instruments prior to use, if needed, are contained in procedures. Sufficient reserves of instruments and equipment are maintained to replace those removed from service for calibration or repair.

#### Disposition

NUREG-0654 R2 element H.11 calls for a description of the provisions made for the testing and maintenance of emergency use equipment and supplies. Previous versions (NUREG-0654 R1 and draft R2) specified a quarterly periodicity. The quarterly periodicity was intentionally removed from the final approved version of NUREG-0654 R2 specifically to allow EP programs greater latitude in establishing inventory periodicities for infrequent use items.

Requirements to calibrate emergency equipment and instruments are specified in site procedures [CEP – H.11.b] and continue to be performed per national standards or the manufacturer's instructions.

Requirements to operationally check emergency equipment and instruments prior to use are procedurally required as applicable.

# Disposition

Historic records provide evidence that emergency use equipment and supplies inventories identify few, if any, issues such that an increased periodicity would not have an adverse effect on availability.

Changing the inventory periodicity from quarterly to semi-annual does not degrade the capability of the equipment and supplies to perform their function.

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Note: Tables and figures contained in the current emergency plan and the common emergency plan/site annex are not included in the following comparison table. All tables and figures were reviewed for possible commitments and key items were included at the end of the comparison table.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Section 1.0, General Information		
1.	1.1 Purpose	[CEP – Introduction]	Non-RIE
	This Emergency Plan contains Florida Power & Light Company's plans for coping with radiological emergencies at the St. Lucie Plant, a facility with two commercial power reactors, Units 1 and 2 located in St. Lucie County, Florida.	The NextEra Common Emergency Plan provides the means to protect the health and safety of the general public, persons temporarily visiting or assigned to nuclear power plants operated by NextEra, and plant employees. NextEra operates the Point Beach, Seabrook Station, Saint Lucie, and Turkey Point nuclear plants.  The NextEra emergency preparedness program is	Revised introductory wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format.  No added, removed or altered commitments or change of intent.
		based upon the requirements of 10 CFR 50.47 and 10 CFR 50 Appendix E, and the guidelines of the U.S. Nuclear Regulatory Commission (NRC) as established in NUREG-0654/FEMA-REP-1, Revision 2.	
2.		The NextEra emergency plan and site annexes are formatted using the outline numbering style of NUREG-0654 R2 to explicitly align with the 10 CFR 50.47(b) planning standards, the requirements of 10 CFR 50 Appendix E, and the elements of NUREG-0654 R2. That formatting provides a direct cross-reference to the elements of NUREG-0654 R2.	Non-RIE Revised introductory wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format. No added, removed or altered commitments or change of intent.
3.		[PSL Annex – Introduction] This St. Lucie Plant (PSL) Emergency Plan Annex supplements the NextEra Common Emergency Plan by providing site specific information unique to the station. It is subject to the same change and audit requirements as the NextEra Common Emergency Plan. This document matches the structure of the NextEra Common Emergency Plan in following the format of NUREG-0654. It only contains the guidance elements that have site specific information therefore the numbering may not always be sequential.	Non-RIE Revised introductory wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format. No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		<ul> <li>[PSL Annex – Introduction]</li> <li>Emergency Planning for the PSL station is performed within the following two Emergency Planning Zones (EPZ):</li> <li>Plume Exposure Pathway EPZ – The PSL Plume Exposure EPZ approximates a 10-mile radius around the plant site and is described and illustrated in the station's Evacuation Time Estimate Study report.</li> <li>Ingestion Pathway EPZ – The PSL Ingestion Pathway EPZ approximates a 50-mile radius around the plant site as illustrated below.</li> <li>50 Mile IPZ map located here.</li> </ul>	
4.		Except for the NextEra Common Emergency Plan, the above documents are maintained and revised separately but as part of the site emergency plan. Any changes made that may affect or alter the emergency plan program or bases documents described above will be evaluated and made using the change process in 10 CFR 50.54(q) and Regulatory Guide 1.219.  There are supporting and complementing emergency plans, including those of federal agencies; the states of Florida, New Hampshire, Wisconsin, and Massachusetts; and local government agencies that support the NextEra sites. These plans contain coordinated emergency response and preparedness instructions for declared emergencies. Each plan has been prepared and is maintained by its respective organization, and is coordinated as appropriate with the other plans.	Non-RIE Revised introductory wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format. No added, removed or altered commitments or change of intent.
5.	The plan has been designed to preclude or mitigate the adverse health and safety effects of an emergency. Four general objectives have been considered in the development of this plan:  1. Timely and accurate assessment of offnormal or emergency conditions, and proper notification of responsible authorities.  2. Effective coordination of emergency actions		Non-RIE Removed introductory wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format. No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	<ul> <li>among all organizations having a response role.</li> <li>3. Continued assessment of actual or potential consequences both on-site and off-site.</li> <li>4. Continuing maintenance of an adequate state of emergency preparedness.</li> </ul>		
6.		APPENDIX 1 DEFINITIONS  Accident: any unforeseen, or unintentional occurrence or mishap resulting in, or potentially resulting in, physical injury or injury due to radiation exposure or excessive exposure to radioactive materials.	Non-RIE Definition added to align fleet terms.
7.		Activated: an emergency response facility is declared activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions.	Non-RIE Definition added to align fleet terms.
8.	1.2 Definitions Annual - Occurring once per calendar year (January 1 through December 31).	Annual: For drills and exercise periodicity, annual is once per calendar year. For training and qualification periodicity and work products, annual is every 12 months not to exceed 15 months.	Non-RIE Revised definition of annual for consistency with NRC and FEMA definition used in managing the cycle.
9.	Assessment Actions - Those actions taken during or after an emergency event to obtain and process information necessary to make decisions to implement specific emergency measures.		Non-RIE  Definition removed. Term is not applicable to formal definition and applies before, during and post event.
10.	Company - Florida Power & Light Company (FPL)		Editorial Removed, not a definition. Abbreviations are provided as they occur in the document and/or in appendix 2. No added, removed or altered commitments or change of intent.
11.		Concept of Operations: delineation of an organization's roles and responsibilities and how the organization will function to accomplish those responsibilities.	Non-RIE Definition added to align fleet terms.

**Current Emergency Plan Common Emergency Plan and Site Annex Change Type** 12. Non-RIE Dosimeter: an instrument used to measure and record radiation doses or dose rates. Definition added to align fleet terms. Emergency Preparedness Peer Team and Peer 13. Non-RIE Team Lead - Emergency Preparedness is a key Definition removed. Unnecessary to discipline that supports the FPL Fleet Excellence emergency plan. Plan. The Peer Team Lead is the highest authority No added, removed or altered in a specific functional area. The purpose of the Peer commitments Team Lead is to provide fleet wide leadership and direction to position the applicable functional area as a top industry performer. The Peer Team Lead provides oversight of functional area programs, policies and processes utilizing assessment reports, performance indicators and peer groups to assess the health of programs, policies and processes. Corrective Actions - Those measures taken to Non-RIE 14. mitigate or terminate an emergency situation at or Definition removed. No basis for near the source of the problem in order to prevent an definition. Term has different uncontrolled release of radioactive material or to common use meaning under CAP. reduce the magnitude of a release, e.g., shutting down equipment, firefighting, repair and damage control. Emergency - Any off-normal event or condition which Non-RIE is classified into one of the four event categories of Definition removed. No reason to Table 3-1, Emergency Classification Table. A define the word differently than the radiological emergency at the Plant is classified in common dictionary definition. accordance with Section 3, Emergency Classification System and Emergency Plan Implementing Procedure EPIP-01, Classification of Emergencies, as an (Notification of) Unusual Event, an Alert, a Site Area Emergency, or a General Emergency. 16. Emergency Action Levels (EALs) - Plant specific **Editorial** values (such as radiological dose rates, Removed duplication definition contamination levels, or specific instrument already in EAL TBD. indications); states (such as containment integrity No added, removed or altered breached or confirmed hurricane warning); or commitments or change of intent. combinations of values and states that may be used as thresholds for initiating specific emergency measures (i.e., designating a particular class of emergency, or initiating a particular protective action).

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
17.	Emergency Coordinator (EC) - The title assumed by the Shift Manager, until relieved by plant management through proper turnover, in the event of emergency conditions at the plant that trigger the Emergency Plan. The EC is responsible for notifying off-site authorities, emergency responders both inside and outside the company, and has full authority and responsibility for on-site emergency response actions. The EC is also responsible for Protective Action Recommendations during the initial stages of an emergency.		Non-RIE Definition removed. Previous ERO title. Current ERO titles and responsibilities documented in Section B.
18.	Joint Information Center Manager- A designated member of the ERO who directs the operation of the Joint Information Center, develops news releases, and provides event information to Corporate Communications Department. He /she will serve as the official spokesperson for the Nuclear Division.		Non-RIE  Definition removed. Previous ERO title. Current ERO titles and responsibilities documented in Section B.
19.	Emergency Operations Center (EOC) - Separate designated off-site facilities from which the St. Lucie County, Martin County and State of Florida Emergency Response Organizations will direct necessary assessment and protective actions for off-site areas.	Emergency Operations Center (EOC): a facility that is the primary base of emergency operations for an ORO in a radiological incident.	Non-RIE Definition revised to align fleet terms.
20.	Emergency Operations Facility (EOF) - A designated off-site facility from which FPL emergency activities including assessment, protective action recommendations, and coordination with state and county officials is conducted.		Non-RIE  Definition removed. Current EOF description documented in Section H (common emergency plan and site annex).
21.	Emergency Operating Procedures (EOPs) - Specific procedures that provide instructions to guide plant operations to terminate or mitigate the consequences of an accident during potential or actual emergency situations.		Non-RIE  Definition removed. EOP description governed by operations.
22.	Emergency Plan Implementing Procedures (EPIPs) - A set of emergency response procedures initiated and followed by the FPL Emergency Response Organization to implement the appropriate sections of the Emergency Plan, assess and classify the emergency, notify the appropriate authorities, and		Non-RIE  Definition removed. Current EPIP description documented in Section P (see also Table P.7-1).

# Current Emergency Plan **Common Emergency Plan and Site Annex** Change Type provide continuing response capability. Emergency Planning Zone (EPZ) - That area, in Editorial 23. Emergency Planning Zone (EPZ): a geographic which emergency planning for plume and/or ingestion area surrounding a commercial NPP for which Revised definition to align fleet exposure has been given consideration, in order to emergency planning is needed to ensure that prompt terms. assure that prompt and effective actions can be and effective actions can be taken by OROs to protect No added, removed or altered taken, to protect the public in the event of a public health and safety in the event of a radiological commitments or change of intent. radiological emergency at the plant. incident. The plume exposure pathway EPZ is approximately 10 miles in radius, while the ingestion exposure pathway EPZ has a radius of approximately 50 miles. Emergency Response Data System (ERDS): a Non-RIE 24. direct near real-time electronic data link between the Definition added to align fleet terms. licensee's onsite computer system and the NRC Operations Center that provides for the automated transmission of a limited data set of selected plant parameters. 25. Emergency Response Organization (ERO) - That Emergency Response Organization (ERO): the **Editorial** portion of the FPL organization assigned personnel assigned to perform tasks and activities Revised definition to align fleet responsibilities upon initiation of the St. Lucie Plant associated with implementation of a licensee's terms. Radiological Emergency Plan. emergency plan for coping with radiological incidents. No added, removed or altered commitments or change of intent. Emergency Security Manager (ESM) - A designated Non-RIE 26. company manager, supervisor, or specialist who will Definition removed. Previous ERO have the responsibility for security aspects of the title. Current ERO titles and emergency response. responsibilities documented in Section B. Emergency Technical Manager (ETM) - A designated Non-RIE 27. company manager who will be responsible for Definition removed. Previous ERO providing technical support for emergency response title. Current ERO titles and actions. responsibilities documented in Section B. Evacuation Time Estimate (ETE): a calculation of the Non-RIE 28. time it would take to evacuate the public within the Definition added to align fleet terms. plume exposure pathway EPZ under emergency conditions. **Evaluation:** the process of observing drill or exercise **Non-RIE** 29. performance to identify strengths and opportunities for Definition added to align fleet terms. improvement in an entity's emergency preparedness

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		and response capabilities.	
30.	Expanded Emergency Response Organization - A group of designated individuals from within the normal company organization who may cease normal activities and assume responsibility for augmenting FPL corrective, assessment and protective actions in the event of a radiological emergency at the plant.		Non-RIE Definition removed. Previous ERO term no longer used in CEP.
31.		<b>Field Monitoring Team (FMT):</b> a group used to detect and monitor radiation in the environment.	Non-RIE Definition added to align fleet terms.
32.	Hostile Action - An act directed toward a nuclear power plant or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force.		Editorial Removed duplication definition already in EAL TBD. No added, removed or altered commitments or change of intent.
33.	Ingestion Exposure Pathway Emergency Planning Zone - That area, approximately 50 miles in radius from the center of the plant, for which plans are made to protect people from ingestion of food-stuffs and water contaminated by radioactive materials released from the plant.	Ingestion Exposure Pathway: the principal exposure from this pathway would be from ingestion of contaminated water or foods, such as milk or fresh vegetables.  Ingestion Exposure Pathway Emergency Planning Zone: a geographic area, approximately 50 miles in radius surrounding a commercial NPP.	Editorial Definition revised and divided to align fleet terms. No added, removed or altered commitments or change of intent.
34.	Joint Information Center (JIC) - A designated facility for use by the JIC Manager and his/her staff in communicating with the news media. Public information officers from State, local, and federal response agencies may also function from the JIC.		Non-RIE Definition removed. Current JIC description documented in Section G (common emergency plan and site annex).
35.		Letter of Agreement (LOA): a document executed between two or more parties outlining specific arrangements relating to the accomplishment of an action. Letters of agreement may cover personnel, equipment, or other types of emergency support, and may take the form of letters, contracts, purchase orders, or other procurement mechanisms.	Non-RIE Definition added to align fleet terms.
36.		Memorandum of Understanding (MOU): a document which details the respective authorities and responsibilities of the signatory organizations for	Non-RIE Definition added to align fleet terms.

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#	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
		specified radiological emergency response planning, preparedness, or response.	
37.		Offsite Response Organization (ORO): state, tribal, or local governmental organization that is responsible for carrying out emergency response functions during a radiological emergency.	Non-RIE Definition added to align fleet terms.
38.		Onsite: the area inside the Protected Area.	<b>Non-RIE</b> Definition added to align fleet terms.
39.	National Oceanic and Atmospheric Administration (NOAA) - Governmental agency responsible for the forecasting of weather conditions. The National Weather Service (NWS) is a branch under NOAA that provides weather information and warning of severe weather situations, such as hurricanes and tornadoes.		Non-RIE  Definition removed. Current offsite weather service description documented in Section H.
40.	Operational Support Center (OSC) - An on-site emergency response facility area where FPL Operations, Maintenance, Radiation Protection, Security, and Chemistry support personnel can report in an emergency and await assignment.		Non-RIE  Definition removed. Current OSC description documented in Section H (common emergency plan and site annex).
41.		Planning Standard (PS): one of the 16 emergency preparedness planning standards established in 10 CFR 50.47(b) that the emergency plan must meet and which are supported by the corresponding sections of 10 CFR 50 Appendix E.	Non-RIE Definition added to align fleet terms.
42.	Plant - The St. Lucie Plant, Units 1 and 2.		Non-RIE Definition removed. Term not used in this context.
43.	Plume Exposure Pathway Emergency Planning Zone - That area, approximately 10 miles in radius from the center of the plant, for which detailed plans are made to protect people from exposure to a plume containing radioactive materials.	Plume Exposure Pathway: a term describing the means by which whole body radiation exposure occurs as a result of immersion in a gaseous release of radioactive material. The principal exposure sources from this pathway are: (a) whole body external exposure to gamma radiation from the plume and from deposited materials, and (b) inhalation exposure from the passing radioactive plume. The duration of principal potential exposures could range in length from 30 minutes to days.	Editorial Definition revised and divided to align fleet terms. No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		Plume Exposure Pathway Emergency Planning Zone: a geographic area approximately 10 miles in radius surrounding a commercial NPP.	
44.		Post-Plume Phase: includes response activities that occur after a release has been terminated. Also known as the "Environmental Phase".	Non-RIE Definition added to align fleet terms.
45.		Potassium lodide (KI): a prophylactic compound containing a stable (i.e., non-radioactive) form of iodine that can be used effectively to block the uptake of radioactive iodine by the thyroid gland in a human being.	Non-RIE Definition added to align fleet terms.
46.		Protected Area: the area (within the Owner Controlled Area) occupied by the nuclear unit(s) and associated equipment and facilities enclosed within the security perimeter fence. The area within which accountability of personnel is maintained in an emergency when required.	Non-RIE Definition added to align fleet terms.
47.		Protective Action Guide (PAG): The projected dose to an individual, resulting from a radiological incident at which a specific protective action to reduce or avoid that dose is warranted.	Non-RIE Definition added to align fleet terms.
48.	Protective Actions - Those measures taken for the purpose of preventing or minimizing radiological exposure to persons.	Protective Action Recommendation (PAR): a formal advisement from a NPP licensee to state and/or county government officials, or from state officials to other offsite officials, concerning emergency measures that should be taken to protect the public from exposure to radiation.	Non-RIE Definition revised to align fleet terms.
49.	Quarterly - Occurring once per calendar quarter with quarters ending on March 31, June 30, September 30, and December 31 in a year.		Non-RIE Definition removed. Common understanding of the term.
50.	Radiation Controlled Area (RCA) - The area (within the Protected Area) wherein personnel access is restricted for the purpose of monitoring and controlling exposure to radiation.		Non-RIE  Definition removed. Defined in RP program documents and procedures.
51.		Radioprotective Drug: a chemical compound or substance serving to protect or aid in protecting against the injurious effects of radiation.	Non-RIE Definition added to align fleet terms.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
52.		Reasonable Assurance: a determination that ORO and utility plans and preparedness are adequate to protect public health and safety in the emergency planning areas of commercial NPPs.	Non-RIE Definition added to align fleet terms.
53.		Reception Center: a pre-designated facility located outside the plume exposure pathway EPZ at which the evacuated public can register; receive radiation monitoring and decontamination; receive assistance in contacting others; receive directions to congregate care centers; reunite with others; and receive general information. It generally refers to a facility where monitoring, decontamination, and registration of evacuees are conducted. A reception center is also referred to as a registration center or public registration and decontamination center.	Non-RIE  Definition added to align fleet terms.
54.	REAC/TS - The Radiological Emergency Assistance Center/Training Site is operated by the Oak Ridge Associated Universities for the Department of Energy. REAC/TS serves as backup medical support for the St. Lucie Plant.		Non-RIE Definition removed. Current REAC/TS description documented in Section L.
55.	Recovery Actions - Those actions taken after an emergency to restore the plant as nearly as possible to its condition before the emergency.		Non-RIE Definition removed. No basis for definition. Term not limited to plant restoration.
56.	Recovery Manager (RM) - A designated company officer or senior manager, who will have responsibility for the direction and control of the EOF. He/she has the authority to establish policy and to expend funds necessary to cope with emergency situations that trigger the implementation of the Emergency Plan.		Non-RIE  Definition removed. Previous ERO title. Current ERO titles and responsibilities documented in Section B.
57.	Shift Communicator (SC) – a specific shiftly designated individual trained and qualified to assist the Shift Manager/Emergency Coordinator in the Control Room in making emergency off-site notifications, notifying the Emergency Response Organizations and performing other activities as directed.		Non-RIE Definition removed. Current ERO titles and responsibilities documented in Section B.
<b>58</b> .	Site - A general term referring to the location of the		Editorial

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	St. Lucie Nuclear Power Plant. Other terms related to the site are given below:		Removed definition. Redundant to Protected Area, onsite and offsite definitions. No added, removed or altered commitments or change of intent.
59.		<b>Site Boundary:</b> the line beyond which the land or property is not owned or controlled by the licensee.	Non-RIE Definition added to align fleet terms.
60.	On-Site - A relative term meaning those persons, things, locations, etc., which are associated with the "site."		Editorial Removed definition. Redundant to Protected Area, onsite and offsite definitions. No added, removed or altered commitments or change of intent.
61.	Off-Site - A relative term meaning those persons, things, locations, etc., which are not directly associated with the "site." For example, this term is used to describe the State and local government groups as "off-site" agencies.	Offsite: the area outside the Protected Area.	Editorial Definition revised to align fleet terms. No added, removed or altered commitments or change of intent.
62.	Owner Controlled Area - That portion of FPL property surrounding and including the St. Lucie Nuclear Power Plant which is subject to limited access and control as deemed appropriate by FPL.	Owner Controlled Area (OCA): That portion of company property surrounding and including the station which is subject to limited access and control as deemed appropriate.	Non-RIE Definition revised to align fleet terms.
63.	Protected Area - The area (within the Owner Controlled Area) occupied by the nuclear units and associated equipment and facilities enclosed within the security perimeter fence. The area within which accountability of personnel is maintained in an emergency.	Protected Area: the area (within the Owner Controlled Area) occupied by the nuclear unit(s) and associated equipment and facilities enclosed within the security perimeter fence. The area within which accountability of personnel is maintained in an emergency when required.	Editorial Definition revised to align fleet terms. No added, removed or altered commitments or change of intent.
64.	State - The State of Florida.		Non-RIE Definition removed. State described in site annex Section A.
65.	State Plan - The State of Florida Radiological Emergency Management Plan.		Non-RIE Definition removed. Supporting plans described in site annex Section P.
66.	System Operations Power Coordinator - An FPL		Non-RIE

# Current Emergency Plan **Common Emergency Plan and Site Annex Change Type** System Operations position which is staffed 24 Definition removed. Term not used hours/day for uninterrupted coordination of electrical in common emergency plan. power distribution. Communication is maintained with all FPL plants, service centers, and the General Office. Technical Support Center (TSC) - A designated on-Non-RIE 67. site facility that serves as a work area for use by Definition removed. Current TSC technical and management personnel. The TSC description documented in Section provides technical support to Control Room personnel H (common emergency plan and in the event of an emergency. site annex). Technical Support Center Supervisor - The person **Non-RIE** 68. assigned to supervise the personnel and direct the Definition removed, Previous ERO technical support activities in the TSC. title. Current ERO titles and responsibilities documented in Section B. 69. Thyroid Dose (CDE) - The thyroid exposure from Thyroid Committed Dose Equivalent (CDE): the **Editorial** inhaled radioiodines - Committed Dose Equivalent. dose to the thyroid that will be received from an No added, removed or altered Thyroid Dose (CDE) is used in Protective Action intake of radioactive material by an individual during commitments or change of intent. determination. the 50-year period following the intake (10 CFR 20.1003). Total Dose (TEDE) - The total exposure from both Total Effective Dose Equivalent (TEDE): the sum of Editorial 70. external and internal (weighted) sources - Total the deep dose equivalent (for external exposures) and Definition revised to align fleet Effective Dose Equivalent. committed effective dose equivalent (for internal terms. No added, removed or exposures). altered commitments or change of intent. Transient Population: persons who do not 71. Non-RIE permanently reside in the plume exposure pathway Definition added to align fleet terms. EPZ, but may be present during an emergency. [CEP -- A.1] 72. 1.3 Scope and Applicability Non-RIE The Emergency Plan describes Florida Power & Light | Element A.1.a.1 below provides a summary of Revised wording to reflect a fleet Company's plans for responding to emergencies that NextEra response organization responsibilities as common emergency plan with may develop at the St. Lucie Plant. The plan has they relate to the overall concept of operations for station annexes and align to event response. A detailed description of the NextEra been prepared to meet the requirements of 10 CFR NUREG-0654 R2 format. 50.47, 10 CFR 50.72, and 10 CFR 50 Appendix E. Emergency Response Organization (ERO) is No added, removed or altered The purpose of this plan is to define and assign contained in Section B. commitments or change of intent. authority and responsibility in order to protect the The elements below identify the federal, Offsite health and safety of the public and plant personnel. Response Organizations (OROs), and other This plan applies to all plant emergencies which have organizations that encompass the overall response

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	resulted in, or which increase the risk of the accidental release of radioactive materials to the environment.  Plans have been developed based upon knowledge of the potential consequences, timing, and release characteristics of a spectrum of events. Emergency Planning Zones have been defined. Figure 1-1 illustrates the Plume Exposure Pathway Emergency Planning Zone for the St. Lucie Plant. The map (Figure 1-1) does not specifically include the area of ocean east of the plant. Since there are no islands in that direction, any evacuation of boating traffic would be addressed on a best effort basis. A key component of this plan is coordination with federal, state, and county authorities who contribute to the overall response effort. This plan outlines company responsibilities within the framework of the overall emergency response organization, and provides a conceptual basis for the development of the detailed procedures necessary to implement the plan.	organization for an event at a NextEra site.	
73.	The Emergency Plan defines emergency conditions and delineates the responsibilities and duties of the FPL Emergency Response Organization. The Emergency Plan is concerned with the following basic activities, which are discussed in the Plan in detail:  1. Organization and resources adequate to detect the presence of an emergency condition, assess the condition, and respond in an appropriate manner (Chapter 2).  2. Assignment of an off-normal event to its proper emergency classification (Chapter 3).  3. Notification of off-site authorities, as required, and continuing communications (Chapter 4).  4. Gathering and interpreting data to determine appropriate actions (Chapter 5).  5. Assisting governmental agencies in the development of information for the public both in terms of preparatory education and emergency response information (Chapter 6).	<ol> <li>NextEra         Emergencies are initially declared and responded to by the on-shift staff under the direction of the Shift Manager. Augmentation of the shift ERO is required at the Alert emergency classification level or higher, and discretionary at the Unusual Event emergency classification level. The ERO has the capability to expand or contract to meet the needs of the emergency.         When the emergency response facilities are staffed the augmenting ERO relieves the on-shift personnel of emergency response functions not directly associated with unit operations. NextEra overall responsibilities for event response are as follows:         <ul> <li>Recognize, classify and declare an emergency.</li> <li>Notify appropriate NextEra personnel, federal, and OROs.</li> </ul> </li> </ol>	Non-RIE Revised wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format. No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	6. Maintaining the FPL Emergency Preparedness Program in a state of readiness (Chapter 7).	<ul> <li>Request additional support from federal, ORO, and private organizations.</li> <li>Establish and maintain effective communications with onsite and offsite entities.</li> <li>Continuously assess the consequences of the accident, and periodically communicate response status and assessment information to the appropriate groups and authorities.</li> <li>Take protective actions onsite and recommend protective actions to offsite authorities.</li> <li>Monitor and control radiation exposure of personnel responding during an emergency.</li> <li>In conjunction with OROs, provide emergency information to the media and public through periodic media briefings and media statements</li> </ul>	
74.	Associated with this Emergency Plan are implementing procedures which provide a source of pertinent information and data required by the response organization during an emergency. These procedures are listed in Appendix F.	[CEP – P.7] Table P.7-1 provides a listing, by title, of the common response and maintenance procedures required to implement the emergency plan, and the section(s) of the emergency plan to be implemented by each procedure.  A listing, by title, of the site-specific response and maintenance procedures required to implement the emergency plan is provided in the site annexes.  [Annex – P.7] Table P.7-1 provides a listing of the PTN site-specific procedures required to maintain and implement the emergency plan, and the section(s) of the emergency plan implemented by each procedure.	Editorial Aligned EPIP list with NUREG-0654 R2 element. No added, removed or altered commitments or change of intent.
75.	Off-normal events have been separated into the following four classifications of emergencies:  A. Notification of Unusual Event  B. Alert  C. Site Area Emergency	[CEP – D.1]  NextEra has established and maintains a standard emergency classification and emergency action level scheme. The EAL technical basis manual is referenced in the site annexes. The spectrum of postulated emergency events is categorized into the	Editorial Wording altered to align with NUREG-0654 R2 element. No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	D. General Emergency These four classes represent emergency conditions which trigger activation of emergency plans and procedures. When an emergency is declared in connection with one of these four classes, individuals assume new titles with special responsibilities. Each emergency class is characterized by abnormal plant events detected by Control Room instrumentation and/or routine or directed surveillance activities.	following four (4) emergency classification levels (ECLs):  • Unusual Event  • Alert  • Site Area Emergency  • General Emergency	
76.	The company's response to an emergency condition consists of an on-shift (immediate) response and an expanded (augmented) response Emergency Response Organization (ERO) which can readily adapt to an emergency condition as it develops. The immediate response phase encompasses the period of time and sequence of actions associated with the initial detection of an off-normal event, classification as an emergency, and activation of the Emergency Response Organization, if required.		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording removed. Generalized description now provided in greater detail within the elements to specifically describe the capability/commitment to the level of detail of the NUREG-0654 R2 element and fleet description.
77.	During this phase, the Shift Manager assumes responsibility as the Emergency Coordinator and initiates the following general activities:  1. Diagnosis of the emergency 2. Initiation of corrective actions 3. Classification of the emergency 4. Notification of appropriate FPL authorities 5. Notification of appropriate off-site authorities During the expanded response phase, the Emergency Coordinator will assess the situation and expand, as necessary, the Emergency Response Organization. All available company resources (onsite and off-site) can be mobilized as needed during this period. State, county and federal response organizations can become fully operational, as required. Continuing corrective, assessment, and protective actions are underway as required.		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording removed. Generalized description now provided in greater detail within the elements to specifically describe the capability/commitment to the level of detail of the NUREG-0654 R2 element and fleet description.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Table 1-1 summarizes the sequence of actions taken during the phased response. Figure 1-2 delineates the initial notification flow.  As discussed throughout this plan, FPL maintains adequate facilities and equipment for detecting, assessing, and responding to emergencies.  Redundant means of communications among key response participants are maintained. FPL also maintains agreements that will provide emergency medical, rescue, or fire support on-site, if needed. The training program is designed to maintain the proficiency of the Emergency Response Organization.		
78.	The FPL individual in charge of on-site emergency response during the immediate and expanded response phases is the Emergency Coordinator. The senior company official involved in emergencies, with responsibility for policy and authority to expend funds, is the Recovery Manager. The Recovery Manager is also responsible for Emergency Operations Facility operation during the expanded response phase.	[CEP – B.2] The Emergency Director ERO position has overall command and control of a declared emergency at a NextEra site. The Shift Manager is the individual who is on-shift at all times and assumes the role of Emergency Director upon emergency declaration. As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures, The Shift Manager maintains overall command and control until relieved. [CEP – B.2.a] The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level. Non-delegable responsibilities include the following: • Event declaration • ORO and NRC Notification • PARs for the general public • Emergency Exposure (Dose limits and KI) Approving departures from license conditions per 10	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		CFR 50.54(x) transition from the Shift Manager to the Site Emergency Director upon transfer of command and control.	
79.	In St. Lucie and Martin Counties, the individual responsible during emergencies is the Chairperson, County Board of Commissioners or his/her designate (Director of County Department of Public Safety/Emergency Management). In both counties, the Chairperson, County Board of Commissioners, is responsible for direction and control during emergencies.	[CEP A.1.a]  4. Offsite Response Organizations The NextEra ERO coordinates response actions with OROs. Interface between the site and the OROs is governed by their respective emergency plans, which are developed and maintained in coordination with the NextEra emergency plan. OROs are described in the site annexes.  [PSL Annex A.1.a]  3 The county and municipal governments (within the counties) with emergency service departments and other agencies interrelated to these local governments within the 10-mile EPZ (plume exposure pathway) of PSL are: a. St. Lucie County b. Martin County The county and municipal governments (within the counties) with emergency service departments and other agencies interrelated to these local governments within the 50-mile EPZ (ingestion exposure pathway) of PSL are: a. Indian River County b. Brevard County c. Palm Beach County d. Osceola County e. Okeechobee County f. Highlands County g. Glades County The responsibility for hosting evacuees rests on Palm Beach, Indian River, and Brevard Counties. Boards of County Commissioners will take proper and responsible action to protect life, health, safety, property, and the environment from the consequences of nuclear power accidents. During radiological emergencies, resources and personnel of	Non-RIE Reworded text to align with CEP. No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		St. Lucie, Martin, Indian River, Palm Beach, and Brevard Counties will be reserved and available for use by County Commissioners. Decision to implement protective action recommendations will be made jointly by the Chairpersons, Boards of County Commissioners (of the affected counties), and the Governor or State Director, Division of Emergency Management. All County personnel and resources will be under the control of the County Commissioners. Federal and State resources will also be available to the Counties.	
80.	As indicated in Chapter 2 of the State Plan, the State	[CEP A.1.a.3.a]	Non-RIE
	Emergency Response Team (SERT) will operate from the State Emergency Operations Center in Tallahassee led by a Governor-appointed State Coordinating Officer (SCO), usually the Director of the Division of Emergency Management.	The principle state agencies having planning and implementation responsibilities for emergencies for PSL are:  a. State of Florida Division of Emergency Management  The Division of Emergency Management	Reworded text to align with CEP.  No added, removed or altered commitments or change of intent.
		(DEM) is the state agency authorized to receive initial notification from Florida Power & Light Company (FPL). The State Watch Office (SWO) is responsible for alerting the state and county emergency response agencies to all notifications from FPL.	
81.	1.5 Supporting Plans and Agreements	[CEP - P.6]	Non-RIE
	Supporting plans and agreements are included in the Appendices of this plan. Additional material utilized in the preparation of the St. Lucie Plan are:	Emergency plans developed by other agencies that support the NextEra Common Emergency Plan include the following:  • Department of Homeland Security National Response Framework  • U.S. Nuclear Regulatory Commission Incident	Reworded text to align with CEP.  No added, removed or altered commitments or change of intent.
		Response Plan Plans for organizations that support individual sites are listed in the site annexes.	
		ANNEX – P.6 External emergency plans specific to the support of PSL include the following:	
		Florida Emergency Response Plan	

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		St. Lucie County Emergency Operations Plan	
		Martin County Emergency Operations Plan	
82.	<ol> <li>NUREG-0654, Rev. 1, FEMA-REP-1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in support of Nuclear Power Plants; November, 1980.</li> <li>NUREG-0654, FEMA-REP-1, Rev. 1, Supplement 3, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants - Criteria for Protective Action Recommendations, November, 2011.</li> <li>NUREG-0578, TMI-2 Lessons Learned Task Force: Status Report and Short-Term Recommendations; July, 1979.</li> <li>NUREG-0737, Clarification of TMI Action Plan Requirements; November, 1980.</li> <li>10 CFR 20, Standards for Protection Against Radiation.</li> <li>10 CFR 50, Domestic Licensing of Production and Utilization Facilities.</li> <li>10 CFR 50.54 (hh)(1), Potential Aircraft Threat</li> <li>EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents; October 1991.</li> <li>Reg. Guide 1.97, Revision 2, Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident, December, 1980.</li> <li>NUREG-0728, Rev. 4, NRC Incident Response Plant (IRP), April 14, 2005.</li> <li>NUREG/CR-7002, Criteria For Development of Evacuation Time Estimate Studies</li> <li>UFSAR - Unit 1, Section 13.3, Emergency Planning</li> </ol>	[CEP – Introduction] The formal NextEra emergency plan for each NextEra site consists of the following program and bases documents:  • NextEra Common Emergency Plan – The NextEra common emergency plan identifies and describes the methods for responding to emergencies and maintaining emergency preparedness. Planning efforts common to all NextEra power reactor sites are encompassed within the NextEra common emergency plan.  • Site Emergency Plan Annex – The site emergency plan annexes contain information and guidance that is unique to the site. The site annexes are subject to the same review and audit requirements as the common emergency plan.  • Site Emergency Action Level (EAL) Technical Basis Document (TBD) – The EAL TBD establishes the classification scheme used to declare emergencies. The EAL TBD documents references and inputs used to determine values or events that would result in declaration of an emergency. The EAL TBD fulfills requirements of 10 CFR 50 Appendix E.IV.B.1.  • Site On-Shift Staffing Analysis – The on-shift staffing analysis documents that the minimum shift crew can perform the actions required by Emergency Operating Procedures (EOP) and the emergency plan, without task overlap or overburden, prior to Emergency Response Organization (ERO) augmentation. The on-shift staffing analysis fulfills requirements of 10 CFR 50 Appendix E.IV.A.9.  • Site Evacuation Time Estimate (ETE) Study – The ETE study defines the plume exposure (~10 mile) Emergency Planning Zone (EPZ). It documents the population within defined areas of	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Added specific list of documents that constitute the formal emergency plan. CEP Appendix 3 documents a 10 CFR 50 Appendix E.IV Cross Reference. Regulatory references and guidance specific to a emergency plan basis document are listed in those documents.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	14. UFSAR - Unit 2, Section 13.3, Emergency Planning 15. Fire Protection Plan (AP 1800022) 16. St. Lucie Security Plan 17. Nuclear Energy Policy on Exposure Limits for Emergency Response Personnel, Revision to Policy Statement, Ltr. No. JNO-HP-94-056, 26 October, 1994. 18. On-Shift Staffing Analysis in accordance with 10 CFR 50, Appendix E, Section IV.A, Revision 0, December 2012. 19. KLD TR-533, St. Lucie Nuclear Power Plant, Development of Evacuation Time Estimates	the EPZ and establishes evacuation routes and ETEs for different scenarios for those populations. The ETE study fulfills requirements of 10 CFR 50 Appendix E.IV paragraphs 2-7.  • Site Protective Action Recommendation (PAR) Technical Basis Manual (TBM) — The PAR TBM document the bases used to develop site-specific protective action recommendation procedures. The PAR TBM fulfills requirements of 10 CFR 50 Appendix E.IV paragraph 3.  • Site Alert and Notification System (ANS) Design Report — The ANS design report is the FEMA-approved document that contains the specific design, testing, and maintenance of the system. The ANS design report fulfills requirements of 10 CFR 50 Appendix E.IV.D.3.  Except for the NextEra Common Emergency Plan, the above documents are maintained and revised separately but as part of the site emergency plan. Any changes made that may affect or alter the emergency plan program or bases documents described above will be evaluated and made using the change process in 10 CFR 50.54(q) and Regulatory Guide 1.219.  [ANNEX – Introduction] This St. Lucie Plant (PSL) Emergency Plan Annex supplements the NextEra Common Emergency Plan by providing site specific information unique to the station. It is subject to the same change and audit requirements as the NextEra Common Emergency Plan.	
83.	TABLE 1-1, TYPICAL SEQUENCE OF ACTIONS  Detection of Off-Normal Conditions <ul> <li>Individual identifies off-normal condition.</li> </ul>	[CEP – D.3] A summary of response actions taken at each ECL is as follows:  1. Unusual Event (UE)	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Provided list of typical actions by ECL.
	Individual immediately notifies Shift Manager (SM).  Response Actions	<ul> <li>Initial and follow-up event notification to the OROs and NRC.</li> <li>Notification of ERO personnel. This is an information only notification and does not require</li> </ul>	LOL.

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- Shift Manager (SM) diagnoses condition and directs initial corrective action to control or mitigate the condition.
- Shift Manager (SM) classifies condition in accordance with plant procedures. If the condition is classified as an emergency, the SM implements the Emergency Plan and becomes the Emergency Coordinator (EC).
- The Emergency Coordinator (EC) mobilizes on-site response teams as necessary to assess and control the emergency.
- Emergency Coordinator (EC) initiates necessary protective actions for onsite personnel, and evaluates need for protective action recommendations for the general public.
- Shift Communicator (SC) notifies state and county in accordance with plant procedures.
- The Emergency Coordinator (EC) orders mobilization of the Emergency Response Organization (ERO) required for Alert classification or higher classification, in accordance with plant procedures.
- Shift Communicator (SC) notifies NRC via Emergency Notification System (ENS) communications link, in accordance with plant procedures.

# **Expanded Response** (as appropriate)

• The Technical Support Center (TSC) and the Operational Support Center (OSC) are staffed and declared operational assuming command and control of the emergency. This includes Protective Action Recommendations (PARs), notifications, and classification.

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activation of emergency facilities or response organizations. Any Emergency Response Facility (ERF) may be activated at the discretion of the Emergency Director.

#### 2. Alert

- · Initial and follow-up event notification to the OROs and NRC.
- Augmentation of the shift ERO (refer to Element A.1.a) by activating the Technical Support Center, Operations Support Center and **Emergency Operations Facility.**
- The Joint Information System shall be established at this ECL, with Joint Information Center activation determined in coordination with the offsite agencies.
- · If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.
- 3. Site Area Emergency
  - · Initial and follow-up event notification to the OROs and NRC.
  - · Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.
  - The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).
  - Implementation of onsite protective actions (refer to Section J).
  - If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.
  - · Offsite precautionary actions may be recommended under certain conditions (as required by site specific OROs).
- 4. General Emergency
  - Initial and follow-up event notification to the OROs and NRC.

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	<ul> <li>The Recovery Manager (RM) proceeds to the Emergency Operations Facility (EOF). Recovery Manager (RM) notifies Emergency Coordinator (EC) when Emergency Operations Facility (EOF) is operational and assumes responsibility for recommending off-site protective actions and for communications with off-site organizations. The Emergency Coordinator (EC) can now devote his/her attention to control of the power plant.</li> <li>Recovery Manager (RM) (or designated response staff) receives and assesses periodic plant status, radiological data, and meteorological data, and continues communications and coordination with the state and county authorities.</li> <li>Recovery Manager (RM) continues assessment of conditions and control of FPL response until plant conditions stabilize then closes out with summary to off-site authorities (Alert or higher classification) or prepares for further long-termactivities.</li> <li>Joint Information Center Manager proceeds to the Emergency Operations Facility (EOF) as appropriate and establishes communications with the Recovery Manager (RM) and Corporate Communications.</li> </ul>	<ul> <li>Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.</li> <li>The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).</li> <li>Implementation of onsite protective actions (refer to Section J) if not previously performed.</li> <li>If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.</li> <li>Offsite protective action recommendations are communicated to the OROs and NRC.</li> </ul>	
84.	FIGURE 1-2 INITIAL NOTIFICATION  Section 2.0, Organization, Facilities and Support Services		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed figure. Notification process described in Section E, Notification Methods and Procedures.
85.	2.1 Elements of the Emergency Response	[CEP – A.1]	Editorial

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	Organization This section defines the primary components of the overall Emergency Response Organization and the relationship of each component to the total effort.	Element A.1.a.1 below provides a summary of NextEra response organization responsibilities as they relate to the overall concept of operations for event response. A detailed description of the NextEra Emergency Response Organization (ERO) is contained in Section B.	The CEP and Annexes are formatted in a 50.47(b) outline. No added, removed or altered commitments or change of intent.
		The elements below identify the federal, Offsite Response Organizations (OROs), and other organizations that encompass the overall response organization for an event at a NextEra site.	
86.	Florida Power & Light Company	[CEP – A.1.a]	Non-RIE
	Florida Power & Light Company (FPL) is the licensed operator of the St. Lucie Plant. As the licensed operator, FPL has developed this Emergency Plan (and associated procedures) to specify actions and provide a framework for emergency response. FPL's primary responsibilities include the following:  1. Diagnosis and corrective action.  2. Emergency classification.  3. Notification of appropriate outside response organizations and continuing communication.  4. Initiation of protective actions for employees and others on-site.  5. Recommendation of protective actions, for the public.  6. Mobilization of Florida Power & Light Company Emergency Response Organization.  7. Continuing data collection, dose projection, and assessment actions.  8. Owner Controlled Area recovery and re-entry. The Florida Power & Light Company Emergency Response Capability is described in detail in Section 2.2 and illustrated in Figure 2-1, with minimum crew staffing illustrated in Table 2-1.	Emergencies are initially declared and responded to by the on-shift staff under the direction of the Shift Manager. Augmentation of the shift ERO is required at the Alert emergency classification level or higher, and discretionary at the Unusual Event emergency classification level. The ERO has the capability to expand or contract to meet the needs of the emergency.  When the emergency response facilities are staffed the augmenting ERO relieves the on-shift personnel of emergency response functions not directly associated with unit operations. NextEra overall responsibilities for event response are as follows:  Recognize, classify and declare an emergency.  Notify appropriate NextEra personnel, federal, and OROs.  Request additional support from federal, ORO, and private organizations.  Establish and maintain effective communications with onsite and offsite entities.  Continuously assess the consequences of the accident, and periodically communicate response status and assessment information to the appropriate groups and authorities.  Take protective actions onsite and recommend protective actions to offsite authorities.	Altered content to encompass applicable detail from each NextEra site.
		<ul> <li>Monitor and control radiation exposure of personnel responding during an emergency.</li> </ul>	

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		In conjunction with OROs, provide emergency information to the media and public through periodic media briefings and media statements.	
87.	2. State of Florida Emergency Response Organization As stated in State Plan, Appendix III, Section III, St. Lucie and Martin Counties are responsible for initial radiological emergency response operations. Should the scope of the emergency exceed the response capability of the risk counties, increased State action will be warranted. The Governor may transfer responsibility for overall emergency management to the State by issuing an Executive Order under the provisions of Section 252.35, Florida Statutes. Upon issuance of such an Executive Order, the risk, host and ingestion counties will continue to coordinate county response operations. In accordance with Chapter 252, Part III, Florida Statues, Florida has also adopted the Emergency Management Assistance Compact and Memoranda of Understanding between the Counties, other States and private organizations. These agreements provide mechanisms to obtain additional resources. State of Florida Division of Emergency Management The Division of Emergency Management (DEM) is the state agency authorized to receive initial notification from Florida Power & Light Company (FPL). The State Watch Office (SWO) is responsible for alerting the state and county emergency response agencies to all notifications from FPL. Specific discussion on transportation of state emergency response personnel to the vicinity of the plant is discussed in Chapter 8 of the State Plan. This emergency response is conducted in accordance with the State Plan prepared by the DEM, in coordination with other State and County emergency response agencies. The locations where State Plan copies are kept at the St. Lucie Plant appear in Appendix D. The DEM's defined responsibilities include:	<ul> <li>[PSL Annex A.1.a]</li> <li>Offsite Response Organizations (ORO)</li> <li>The principle state agencies having planning and implementation responsibilities for emergencies for PSL are:</li> <li>b. State of Florida Division of Emergency Management</li> <li>The Division of Emergency Management (DEM) is the state agency authorized to receive initial notification from Florida Power &amp; Light Company (FPL). The State Watch Office (SWO) is responsible for alerting the state and county emergency response agencies to all notifications from FPL.</li> <li>Specific discussion on transportation of state emergency response personnel to the vicinity of the plant is discussed in Chapter 8 of the State Plan. This emergency response is conducted in accordance with the State Plan prepared by the DEM, in coordination with other State and County emergency response agencies.</li> <li>The DEM's defined responsibilities include:</li> <li>Overall responsibility for coordinating the development and implementation of state and county emergency response plans.</li> <li>Command and control of State emergency responseresources.</li> <li>Notification of state and county response agencies.</li> <li>Coordination among state, federal (i.e., FEMA, EPA, DOE), and local agencies.</li> </ul>	Editorial Removed state related ORO figures and information addressed in the State emergency plans. Updated agency descriptions. No added, removed or altered commitments or change of intent.
	Overall responsibility for coordinating the		

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	development and implementation of state and county emergency response plans.  2. Command and control of State emergency response resources.  3. Notification of state and county response agencies.  4. Coordination among state, federal (i.e., FEMA, EPA, DOE), and local agencies.		
88.	State of Florida Department of Health The Department of Health is the state agency authorized to provide the DEM with technical support and expertise in public health matters. Department of Health defined responsibilities include:  1. Emergency medical services, public health, and sanitation.  2. Economic and social services. Through the Bureau of Radiation Control 3. Radiological monitoring, off-site.  4. Off-site radiological exposure control and protective response recommendations for plume and ingestion pathway counties.	<ul> <li>[PSL Annex - A.1.a.3.b]</li> <li>State of Florida Department of Health</li> <li>The Department of Health is the state agency authorized to provide the DEM with technical support and expertise in public health matters.</li> <li>Department of Health defined responsibilities include:</li> <li>1. Emergency medical services, public health, andsanitation.</li> <li>2. Economic and social services</li> <li>Through the Bureau of Radiation Control</li> <li>3. Radiological monitoring, off-site.</li> <li>4. Off-site radiological exposure control and protective response recommendations for plume and ingestion pathway counties.</li> </ul>	Non-RIE Reworded text to align with CEP. No added, removed or altered commitments or change of intent.
89.	Department of Highway Safety and Motor Vehicles, Division of Florida Highway Patrol The Florida Highway Patrol, through the coordination of the Department of Law Enforcement, provides the following services.  1. Traffic control 2. Communications (support) 3. Law enforcement coordination 4. Upon request, assist in the transportation of samples for analysis when immediate analysis is necessary 5. Within their authority, evaluate and exclude individuals from designated public areas. These services will be provided in accordance with	[PSL Annex A.1.a.3.c]  c. Department of Highway Safety and Motor Vehicles, Division of Florida Highway Patrol The Florida Highway Patrol, through the coordination of the Department of Law Enforcement, provides the following services.  1. Traffic control 2. Communications (support) 3. Law enforcement coordination 4. Upon request, assist in the transportation of samples for analysis when immediate analysis is necessary	Editorial Removed state related ORO figures. Updated agency descriptions. No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	the State Plan (Chapter 2). Other State Agencies As defined in the State Plan (Chapter 2), the DEM can request support as necessary from the following state agencies.  1. Department of Transportation 2. Department of Military Affairs 3. American Red Cross	Within their authority, evaluate and exclude individuals from designated public areas.  These services will be provided in accordance with the State Plan (Chapter 2).	
90.	2.1 3. County Emergency Response Agencies Counties that fall within the plume exposure pathway EPZ include St. Lucie County and Martin County. Counties that fall within the ingestion pathway EPZ include St. Lucie County, Martin County, Indian River County, Brevard County, Palm Beach County, Osceola County, Okeechobee County, Highlands County and Glades County. The responsibility for hosting evacuees rests on Palm Beach, Indian River, and Brevard Counties. The county emergency response agencies are described in Appendix III of the State Plan.	[PSL Annex A.1.a] The county and municipal governments (within the counties) with emergency service departments and other agencies interrelated to these local governments within the 10-mile EPZ (plume exposure pathway) of PSL are:  a. St. Lucie County b. Martin County The county and municipal governments (within the counties) with emergency service departments and other agencies interrelated to these local governments within the 50-mile EPZ (ingestion exposure pathway) of PSL are:  a. Indian River County b. Brevard County c. Palm Beach County d. Osceola County f. Highlands County g. Glades County The responsibility for hosting evacuees rests on Palm Beach, Indian River, and Brevard Counties. Boards of County Commissioners will take proper and responsible action to protect life, health, safety, property, and the environment from the consequences of nuclear power accidents. During radiological emergencies, resources and personnel of St. Lucie, Martin, Indian River, Palm Beach, and Brevard Counties will be reserved and available for use by County	Editorial Updated county agency descriptions. Support agency under LOA moved to appropriate section. No added, removed or altered commitments or change of intent.

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#	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
		Commissioners. Decision to implement protective action recommendations will be made jointly by the Chairpersons, Boards of County Commissioners (of the affected counties), and the Governor or State Director, Division of Emergency Management. All County personnel and resources will be under the control of the County Commissioners. Federal and State resources will also be available to the Counties.	
91.	Chapter 10 of the State Plan addresses short term actions required in the plume exposure pathway EPZ and ingestion pathway EPZ.  State agencies take the lead in controlling ingestion pathway response. Appendix III establishes procedures to protect citizens of St. Lucie County and visitors to the County from the effects of an accident at the St. Lucie plant. Section II A of Appendix III includes the St. Lucie County Radiological Emergency Organization.  Section II B of Appendix III establishes procedures to protect citizens of Martin County and visitors to Martin County from the effects of an accident at the St. Lucie plant. Section II B of Appendix III describes the Martin County Radiological Emergency Organization.  Section II C, II D, and II E to Appendix III include host plans for Indian River County, Palm Beach County, and Brevard County Commissioners will take proper and responsible action to protect life, health, safety, property, and the environment from the consequences of nuclear power accidents. During radiological emergencies, resources and personnel of St. Lucie, Martin, Indian River, Palm Beach, and Brevard Counties will be reserved and available for use by County Commissioners. Decision to implement protective action recommendations will be made jointly by the Chairpersons, Boards of County Commissioners (of the affected counties), and the Governor or State Director, Division of Emergency Management. If time does not permit State		Non-RIE Removed information addressed in State and County Plans from CEP.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	involvement in initial decision making, the decision to		
	take protective actions may be made by the		
	Chairperson, Board of County Commissioners (for the		
	respective affected county), or designated alternate.		
	All County personnel and resources will be under the		
	control of the County Commissioners. Federal and		
	State resources will also be available to the Counties.		
	Alerting, warning, and evacuation of populations will		
	be in accordance with procedures prescribed in		
	Sections VI and VII of Appendix III and in Chapters 5		
	and 11 of the State Plan. Sections IX and XII of		
	Appendix III describe hosting responsibilities,		
	including shelter location and operation, and evacuee		
	registration, monitoring, and decontamination.		
	Responsibility for direction and control of emergency		
	response of each county rests with the Chairperson,		
	Board of County Commissioners, unless a disaster		
	declaration under provisions of Florida Statutes,		
	Chapter 252 is in effect. If a disaster has been		
	declared, responsibility for direction and control rests		
	with the Governor or authorized representative.		
	In accordance with Chapter 252, Part III, Florida		
	Statues, Florida has also adopted the Emergency		
	Management Assistance Compact and Memoranda		
	of Understanding between the Counties, other States		
	and private organizations. These agreements		
	provide mechanisms to obtain additional resources.		
	County Departments of Public Safety report to the		
	Boards of County Commissioners. This is also true for		
	other County resources, including the Sheriffs'		
	Offices, Engineers' Offices, Fire Departments, Public		
	Health Offices, School Boards, and other county		
	organizations.		
	The Chairperson, Board of County Commissioners,		
	has responsibility for overall emergency response		
	planning. County Public Safety/Emergency		
	Management Directors are responsible for actual plan		
	development and updating. St. Lucie County, Palm		
	Beach County, Martin County, Indian River County,		
	and Brevard County each have an Emergency		

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Operations Center (EOC).		
	St. Lucie and Martin County Public Safety/Emergency		
	Management Directors		
	The Public Safety/Emergency Management Directors		
	for St. Lucie and Martin Counties have the major		
	responsibility for coordinating emergency operations		
	including communicating with the County Board and		
	State DEM. The County Public Safety Directors		
	receive initial notification from Florida Power & Light Company simultaneously with DEM via the State's		
	Hot Ring Down telephone for all radiological		
	emergencies. The St. Lucie and Martin County Public		
	Safety/Emergency Management Directors then have		
	responsibility for initiating any necessary protective		
	actions for off-site areas (including off-site		
	evacuations) based upon available information from		
	the FPL Emergency Coordinator, Recovery Manager,		
	and Bureau of Radiation Control. The St. Lucie		
	County and Martin County plans are a part of the State Plan. In addition to overall responsibility, the		
	Public Safety Directors have responsibility for the		
	following:		
	St. Lucie and Martin County Public Safety/Emergency		
	Management Directors (continued)		
	Coordination of county resources		
	2. Protective response for off-site areas		
	including warning and evacuation		
	3. Communications		
	4. Public information		
	5. Off-site radiological exposure control		
	6. Coordination of arrangements for shelter and		
	feeding of evacuees		
	County Sheriffs (St. Lucie and Martin Counties)		
	At the request of the respective Public		
	Safety/Emergency Management Director, the County		
	Sheriffs can provide the following support services:		
	1. Law enforcement		
	2. Warning and evacuation (implementation)		

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	3. Traffic control		
	4. Communications (support)		
	5. Rescue (support)		
	Other Local Agencies		
	As defined in the County plans, the Public		
	Safety/Emergency Management Director can request support as necessary from the following:		
	1. County Engineer's Department		
	2. County Road Department		
	County Public Health Departments		
	4. Public School Boards		
	5. County Fire/Rescue Department		
	St. Lucie County-Fort Pierce Fire District by		
	agreement with Florida Power & Light Company		
	(Appendix E) will respond to emergencies on-site		
	upon request.	rosp. 4.4.1	
92.	4. Federal Response Agencies	[CEP A.1.a]	Non-RIE
	U.S. Nuclear Regulatory Commission The Nuclear Regulatory Commission (NRC) will be notified via a dedicated telephone line (ENS) from the Control Room to the Operations Center in Maryland immediately after notification of the appropriate State or local agencies and not later than one hour after the time the licensee declares one of the Emergency Classes. NRC is the Coordinating Agency for incidents that occur at fixed nuclear facilities.  U.S. Coast Guard At the request of Florida Power & Light Company (onsite activities) and the DEM (off-site activities), the Coast Guard can provide rescue assistance in accordance with their general authority as described in Appendix E.  U.S. Department of Energy (DOE)	Federal Organizations  Control, responsibility and interface of federal organizations is governed by the National Response Framework (NRF) and the Nuclear/Radiological Incident Annex to the NRF when they are called to respond to an event at a nuclear power plant. The NRC acts as the lead federal agency with regard to technical matters during a nuclear incident, including providing radiological assistance.	Removed specific detail of federal organizations contained in their respective plans and replaced with description of their organization's coordination for response to nuclear utility.
	Upon request by the Department of Health, DEM can request that the DOE provide a Radiological Assistance Team to aid in evaluating radiological hazards. This support would be provided out of DOE's Savannah River Operations Office, Aiken,		

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	South Carolina. This provision is described in Chapter 9, Section IV, of the State Plan.  DOE is responsible for coordinating the off-site radiological monitoring and evaluation activities of the Federal Government.  Federal Emergency Management Agency (FEMA)  FEMA has the responsibility for coordinating all non-technical response activities of the Federal Government off-site. They serve as the primary point of contact for requests for federal assistance from state and local officials and other federal agencies.		
93.	5. Private Sector Organizations Institute of Nuclear Power Operations (INPO) INPO maintains industry source lists for personnel and equipment which can be made available for support services during an emergency.	<ul> <li>[CEP A.4]</li> <li>Assistance will be provided, as necessary, by federal response organizations and OROs that are mandated by charter, regulation or law to protect public health and safety. Federal response organizations and OROs cooperate with NextEra and have developed radiological emergency plans and procedures in an integrated manner. Additional support agreements (Letter of Agreement – LOA/Memorandum of Understanding – MOUs) are not required with these agencies.</li> <li>Support agreements are necessary when an organization or individual is expected to provide assistance to NextEra and is not required otherwise to do so. To that extent, LOAs have been developed between NextEra and several entities to provide emergency response support and services consistent with this plan.</li> <li>Specifically, the agreement minimum content includes the following:</li> <li>A description of the concept of operations, meaning the mutually accepted criteria for implementation.</li> <li>When the support will be provided (as a minimum, the agreement states that the support provider will offer its services during an emergency at the affected site(s), including</li> </ul>	Editorial Updated company descriptions. No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		Identification of the support to be provided.	
		Arrangements for exchange of information during	
		event support.	
		A contract/purchase order with a private contractor is	
		considered acceptable in lieu of a LOA for the specified duration of the contract. The current	
		signature copies of applicable LOAs and contracts	
		are listed in the site annexes and are maintained	
		locally on file.	
		[PSL Annex A.4]	
		Site specific letters of agreement (LOAs) or	
		memorandums of understanding (MOUs), are maintained by PSL with the following organizations:	
		Westinghouse Electric (ABB/CE)	
		AECOM	
		<ul> <li>Institute of Nuclear Power Operations (INPO)</li> </ul>	
		U.S. Coast Guard	
		Florida Highway Patrol	
		St. Lucie County Sheriff's Department	
		St. Lucie County Fire District	
		City of Ft. Pierce - Police Department	
		City of Ft. Pierce - City Manager	
		Martin County Sheriff's Department	
		AREVA NP Inc. (Framatome Technologies)	
		U.S. Department of Energy (Savannah River	
		Operations)	
		U.S. Department of Energy (REAC/TS)	
		Lawnwood Regional Medical Center	
		Cleveland Clinic Martin Health	
		Bechtel Power Corporation	
		Martin County Fire Rescue	
		Martin County Department of Emergency Services	
94.	Westinghouse Electric		Non-RIE
	ABB/Combustion Engineering (CE), now		The CEP and Annexes are
	Westinghouse Electric, is the Nuclear Steam Supply		formatted in a 50.47(b) outline.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	System vendor for the St. Lucie Plant. Upon request, Westinghouse Electric can supply emergency technical services and resources as provided by the Purchase Order listed in Appendix E.		Previous general content aligned with planning standard. This support organization is addressed in Row 119.
95.	AECOM (previously URS and Washington Group) AECOM is the Architect/Engineer for the St. Lucie Plant. Upon request, URS Corporation can supply emergency technical services as provided by the Purchase Order listed in Appendix E.		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Previous general content aligned with planning standard. This support organization is addressed in Row 119.
96.	2.2 Florida Power & Light Company Emergency Response Organization (ERO) The purpose of this section is to describe FPL's Emergency Response Organization. The Emergency Response Organization is defined relative to the two phases of response and actions which are anticipated. This approach recognizes that the organization will be a dynamic one, dependent upon response time and the severity of the emergency.		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Section purpose descriptions replaced with planning standard wording.
97.	The "on-shift" response consists of shift operators, the plant duty shift and other trained plant personnel as available who are responsible for diagnosing the emergency and taking corrective actions. Along with the required shift operations personnel, the "expanded" response includes personnel necessary to man the TSC, OSC, and EOF. The ERO includes plant and corporate personnel who are available, as the emergency warrants, to assist in assessment actions, control, and stabilization.	[CEP B.1]  1. 10 CFR 50.47(b)(2) Compliance In December of 2019, the NRC issued NUREG- 0654 R2, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants. The scope of NUREG-0654 R2 states "NPP applicants and licensees may voluntarily use the guidance in this document to demonstrate compliance with the underlying NRC regulations." The NextEra emergency plan and site annexes are based on the criteria provided in NUREG-0654 R2 as approved by the NRC.  2. 10 CFR 50 Appendix E Compliance Refer to the 10 CFR 50 Appendix E.IV.A cross- reference in Appendix 3 of this emergency plan.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Content describing analysis of offnormal conditions is included in the EAL TBD.
98.	Normal On-site Operating Organization	[CEP B.1.a]	Non-RIE

Current to Proposed Emergency Plan Comparison Analysis

#### # Current Emergency Plan

A generalized operating organization chart for St. Lucie Plant is shown in Figure 2-3. The specific plant organization chart is in plant procedures. The plant is staffed with qualified personnel prepared to take necessary actions to implement the Emergency Plan and to initiate the necessary immediate response actions.

During normal hours, the operating staff at the St. Lucie Plant consists of approximately 1100 people. During off-hours approximately 76 employees are onsite. Key operating positions are described below:

Site Vice President - St. Lucie Plant

The Site Vice President - St. Lucie Plant, reports to the Regional Vice President and has the direct responsibility for the operation and maintenance of the St. Lucie Plant in a safe, reliable, and efficient manner.

**Operations Director** 

The Operations Director reports directly to the Site Vice President and has the overall responsibility for directing the day-to-day operation of the plant. The Operations Director coordinates operations-related maintenance activities with the Maintenance Manager. The Operations Director is responsible for directing supervisory activities in the area of Operations.

**Assistant Operations Manager** 

The Assistant Operations Manager reports directly to the Operations Director. He/she has responsibility for directing the activities of the nuclear plant operating shifts, including the Shift Manager and Unit Supervisors. He/she holds an NRC Senior Reactor Operator License. He/she is also responsible for supervision of fuel handling operations.

Shift Manager (SM)

The Shift Manager reports directly to the Assistant Operations Manager. He/she is responsible for the actual operation of the nuclear plant and fuel handling operations on his/her assigned shift. He/she holds an

#### **Common Emergency Plan and Site Annex**

A description of the normal site operating organization is contained in each sites' UFSAR (typically Chapter 13).

The requirements for on-shift operations staff, security force staff, and fire brigade/first aid staff are controlled by Technical Specifications and other licensing and administrative documents. Positions from these departments are described in the emergency plan only when assigned an emergency preparedness function that is performed during an emergency.

Site specific on-shift staffing analysis reports are developed in accordance with 10 CFR 50 Appendix E.IV.A.9 and NEI 10-05. The site specific on-shift staffing analysis reports are maintained as part of the site emergency plans and are referenced in the site annexes.

**IPSL Annex -- B.1.a** 

The PSL on-shift staffing analysis report has been developed in accordance with 10 CFR 50 Appendix E.IV.A.9 and NEI 10-05.

Refer to EP-PSL-122, PSL On-Shift Staffing Analysis.

## **Change Type**

Removed description of normal station organization and replaced with reference to the appropriate licensing document.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	active NRC Senior Reactor Operator License.		
	He/she directs the activities of the personnel on		
	his/her shift and is cognizant of maintenance activities		
	being performed while on duty.		
	Unit Supervisor (US)		
	The Unit Supervisor reports directly to the Shift		
	Manager. He/she holds an active NRC Senior		
	Reactor Operator License. He/she directs the		
	activities of the Operators on his/her assigned Unit		
	and remains cognizant of all maintenance activities		
	performed on that Unit while on duty.		
	Nuclear Watch Engineer (NWE)		
	The Nuclear Watch Engineer (NWE) reports directly		
	to both Unit Supervisors. He/she is the operating shift		
	foreman and is responsible for plant operations on		
	his/her shift. The NWE directs the activities of non-		
	licensed operators on his/her shift. Nuclear Watch Engineer (NWE)		
	Chemistry Manager		
	The Chemistry Manager is responsible for		
	administrative oversight of the Chemistry Control Program. He/she serves as a member of the St. Lucie		
	Plant Emergency Response Organization.		
	Radiation Protection Manager		
	The Radiation Protection Manager is responsible for administrative oversight of the Radiation Protection		
	Program. He/she serves as a member of the St. Lucie		
	Plant Emergency Response Organization.		
	Reactor Engineering Supervisor		
	The Reactor Engineering Supervisor reports to the		
	Engineering Manager. He/she supervises the Reactor		
	Engineering Department. He/she is responsible for		
	monitoring day-to-day reactor operation, nuclear		
	physics testing, fuel burnup calculations, fuel shuffles		
	during refuelings, and various administrative duties.		
	Maintenance Director		
	The Maintenance Director reports directly to the Site		
	Vice President. He/she supervises the Electrical		
	Maintenance, Mechanical Maintenance, and		

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Instrument and Control (I&C) Departments. He/she is responsible for the maintenance of mechanical, electrical, and I&C equipment in the nuclear units.		
	System Engineering Manager The System Engineering Manager reports directly to the Engineering Director. He/she supervises general plant engineers and technicians. Nuclear Assurance Supervisor The Nuclear Assurance Supervisor reports directly to the Nuclear Oversight & Assessment Director. He/she supervises the Nuclear Assurance Department. He/she is responsible for directing the activities of the Nuclear Assurance Inspectors who perform surveillance and inspection of nuclear safety related activities to monitor for technical specification and regulatory compliance. Fire Brigade Leader The Fire Brigade Leader reports to the SM, US or EC. The Fire Brigade Leader is a designated on-shift Operations Department individual who has the knowledge or has received sufficient training in plant safety-related systems to understand the effects of fire and fire suppressants on safe shutdown capability and advises the Control Room as required in the FSAR and 10 CFR 50, Appendix R. On-site Review Group (ORG) The On-site Review Group functions to advise the Site Vice President on all matters related to nuclear		
	safety. Specific responsibilities of the ORG are identified in the Quality Assurance Topical Report (QATR).		
99.	2. On-shift Response Phase Initiating Event (Unusual Event, Alert, Site Area Emergency or General Emergency) The emergency response is initiated by any individual who discovers an emergency condition. This person notifies the Shift Manager by the fastest means possible. This first phase is characterized by		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Content describing analysis of offnormal conditions is included in the EAL TBD.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	diagnosis and immediate action by the plant operators on shift.		
100.	Organization	[CEP - B.2]	Non-RIE
	If the diagnosis indicates that the condition should be classified as an Unusual Event, Alert, Site Area Emergency, or General Emergency, the Shift Manager declares an emergency.  The Shift Manager becomes the Emergency Coordinator and, as such, directs the On-shift Emergency Response Organization.  Initially, shift operators and the plant duty staff constitute the response organization. Emergency requirements take immediate precedence over normal operating responsibilities (as determined by procedure or at the direction of the Emergency Coordinator). The Plant Staff Emergency Assignments section describes the emergency services that can be provided initially by shift operators and the plant duty staff. Figure 2-4 shows the On-shift Emergency Response Capability.	The Emergency Director ERO position has overall command and control of a declared emergency at a NextEra site.  The Shift Manager is the individual who is on-shift at all times and assumes the role of Emergency Director upon emergency declaration. As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures, The Shift Manager maintains overall command and control until relieved.  The remote positions (Remote Dose Assessor and engineers) report to the Shift Manager until their associated response facility is activated.	The CEP and Annexes are formatted in a 50.47(b) outline. Content expanded to provide detail consistent with the criteria of NUREG-0654 R2.
101.	Line of Succession		Non-RIE
	In the event the Shift Manager is incapacitated, the Emergency Coordinator will be (in order of succession):  1. Unit Supervisor (from the affected Unit)  2. Any other member of the plant staff with an active Senior Reactor Operator license.  It is the responsibility of the new Emergency Coordinator to ascertain the status of all Emergency Coordinator responsibilities prior to assumption of duty. The Emergency Coordinator can grant permission for watch relief, including his/her own, when it is safe in his/her judgement to do so.  The Site Vice President, Operations Director, or Assistant Operations Manager should assume the Emergency Coordinator function from the Shift Manager following proper turnover. Other senior managers who have extensive plant or industry operating experience or knowledge and Emergency		Relief of sick or incapacitated watch-standers is governed by technical specifications. Line of succession clarified to provide detail consistent with the criteria of NUREG-0654 R2.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Coordinator qualifications may assume the Emergency Coordinator function.		
102.	Actions The Emergency Coordinator initiates the following actions per plant procedures and using his/her judgement:  1. Orders corrective actions to bring the emergency under control.  2. Mobilizes the Emergency Response Organization.  3. Notifies the State Division of Emergency Management State Watch Office Duty Officer and County Public Safety Directors, in accordance with plant procedures.  4. Provides recommendations for off-site protective action as discussed in Chapter 5.  5. Notifies NRC via ENS immediately after notification of the appropriate State or local agencies and not later than one hour after the time the licensee declares one of the Emergency Classes.		Non-RIE ERO function and task hierarchy updated consistent with current NRC and industry guidance. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
103.	Delegation The Emergency Coordinator shall not delegate the following responsibilities prior to the TSC being declared operational:  1. Classification of Emergencies 2. Decision to notify off-site organizations and the content of those notifications. 3. Recommendation of protective actions for the public (off-site). The EC may delegate the completion of certain tasks, but is responsible to ensure that all tasks are completed and logged.	[CEP – B.2.a] The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level. Non-delegable responsibilities include the following:  • Event declaration  • ORO and NRC Notification  • PARs for the general public  • Emergency Exposure (Dose limits and KI) Approving departures from license conditions per 10 CFR 50.54(x) transition from the Shift Manager to the Site Emergency Director upon transfer of command and control.	Non-RIE CEP limits command and control and non-delegable functions to the SM and SED. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
104.	Turnover Once the Technical Support Center (TSC) is operational and proper turnover has been conducted,		Non-RIE Relief of sick or incapacitated watch-standers is governed by

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	the TSC Emergency Coordinator will assume the responsibility for classification of emergencies, notification of off-site organizations and for recommending protective actions.  Once the Emergency Operations Facility (EOF) is operational and proper turnover has been conducted, the Recovery Manager will assume responsibility for notification of off-site organizations and for recommending protective actions.		technical specifications. Line of succession and turnover clarified to provide detail consistent with the criteria of NUREG-0654 R2.
105.	Plant Staff Emergency Assignments A. On-shift Emergency Response Organization 1. The On-shift Emergency Response Organization is composed of operators, the plant duty staff and other trained ERO personnel on-shift. All are qualified in procedures and practices required for the performances of their duties as ERO members. The On-shift Emergency Response Organization takes action until the emergency condition is mitigated or until relieved. 2. Members of the On-shift Emergency Response Organization may consider themselves relieved only upon the specific instructions of the EC or appropriate facility supervisor. Merely knowing that a replacement is present does not constitute a release from emergency duties and responsibilities.	[CEP – B.1.a] The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):  1. Control Room (CR)  A. Shift Manager      Organizational Interface and Coordination     Command and Control     Facility/Group Management and Supervision     Contact and Use of External Support Services     Use of Medical, Fire and Law Enforcement Support     NRC Notification and Communications     Event Classification     ERO Notification     State and Local Event Notification     ERF Communications     Accident Detection and Assessment     Effluent Release and Dose Assessment     OSC Team Priorities, Dispatch and Control     Site Assembly and Accountability     Site Evacuation	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Relief of watch-standers is governed by technical specifications. Relief of ERO positions is by another qualified ERO member.

# Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	<ul> <li>ERO Radiological Protection</li> </ul>	
	Offsite Protective Action	
	Recommendations	
	Emergency Exposure	
	• First Aid	
	Event Termination	
	B. Radiation Protection Technician	
	Radiological Monitoring Activities	
	ERO Radiological Protection	
	Emergency Exposure	
	Contamination Control Measures	
	C. Radiation Protection Qualified Individual (RPQI)	
	<ul> <li>Radiological Monitoring Activities</li> </ul>	
	<ul> <li>ERO Radiological Protection</li> </ul>	
	<ul> <li>Emergency Exposure</li> </ul>	
	<ul> <li>Contamination Control Measures</li> </ul>	
	D. <u>Security Shift Supervisor</u>	
	<ul> <li>Organizational Interface and Coordination</li> </ul>	
	<ul> <li>Use of Medical, Fire and Law Enforcement Support</li> </ul>	
	<ul> <li>NRC Notification and Communications</li> </ul>	
	<ul> <li>Site Assembly and Accountability</li> </ul>	
	<ul> <li>Site Evacuation</li> </ul>	
	E. Shift Technical Advisor (STA)	
	Note – Assigned as a collateral duty in accordance with Technical Specification.	
	<ul> <li>Accident Detection and Assessment</li> </ul>	
	<ul> <li>Core Damage Assessment</li> </ul>	
	F. Shift Classification Advisor	
	Note – Assigned as a collateral duty to an o shift SRO other than the Shift Manager.	on-
	<ul> <li>Event Classification</li> </ul>	
	State and Local Event Notification	

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		Accident Detection and Assessment     Offsite Protective Action     Recommendations  G. Shift Communicator     Note – Assigned as a collateral duty to an onshift position other than the RPT or RPQI.     NRC Notification and Communications     ERO Notification     State and Local Event Notification     OSC Team Priorities, Dispatch and Control  H. Shift Dose Assessor     Note – Assigned as a collateral duty to any on-shift position.     Effluent Release and Dose Assessment	- yyr-
106.	B. Expanded Emergency Response Organization 1. The Expanded Emergency Response Organization is composed of operations personnel and ERO personnel to man the TSC, OSC, and EOF, as necessary. 2. With the knowledge of the appropriate facility supervisor, alternate ERO members may relieve their counterpart on the On-shift Emergency Response Organization.	[CEP – B.1.a]  2. Technical Support Center (TSC)  A. Site Emergency Director  • Organizational Interface and Coordination  • Federal Assistance  • Continuous Emergency Response Operations  • Command and Control  • Facility/Group Management and Supervision  • Contact and Use of External Support Services  • Integration of Offsite Agency Personnel in the ERF  • NRC Notification and Communications  • Event Classification  • State and Local Event Notification  • ERF Communications	Non-RIE  The CEP and Annexes are formatted in a 50.47(b) outline.  Table B-1 lists the functional areas and their key activities, and lists the ERO positions (on-shift and augmenting responders) for those functions.  Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

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# Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	<ul> <li>Facility Activation</li> </ul>	
	<ul> <li>Backup and Alternative Facilities</li> </ul>	
	<ul> <li>Accident Detection and Assessment</li> </ul>	
	<ul> <li>OSC Team Priorities, Dispatch and Control</li> </ul>	
	Site Assembly and Accountability	
	Site Evacuation	
	ERO Radiological Protection	
	Offsite Protective Action     Recommendations	
	Emergency Exposure	
	Event Termination	
	<ul> <li>Recovery</li> </ul>	
	B. <u>TSC Classification Advisor</u>	
	<ul> <li>Facility/Group Management and Supervision</li> </ul>	
	<ul> <li>Event Classification</li> </ul>	
	<ul> <li>State and Local Event Notification</li> </ul>	
	<ul> <li>ERF Communications</li> </ul>	
	<ul> <li>Facility Activation</li> </ul>	
	<ul> <li>Facility Operation</li> </ul>	
	<ul> <li>Accident Detection and Assessment</li> </ul>	
	<ul> <li>ERO Radiological Protection</li> </ul>	
	<ul> <li>Offsite Protective Action</li> </ul>	
	Recommendations	
	C. <u>Reactor Engineer – Remote position</u> supervised by Classification Advisor	
	Facility Operation	
	Accident Detection and Assessment	
	<ul> <li>Core Damage Assessment</li> <li>D. Electrical/I&amp;C Engineer – Remote position</li> </ul>	
	supervised by Classification Advisor	
	Facility Operation	
	Accident Detection and Assessment	
	E. <u>Mechanical Engineer – Remote position</u>	

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	Common Emergency Plan and Site Annex	Change Type
	supervised by Classification Advisor	
	Facility Operation	
	<ul> <li>Accident Detection and Assessment</li> </ul>	
	F. ORO Communicator	
	<ul> <li>State and Local Event Notification</li> </ul>	
	ERF Communications	
	G. ENS Communicator	
	<ul> <li>NRC Notification and Communications</li> </ul>	
	ERF Communications	
	H. TSC Radiation Protection Coordinator	
	<ul> <li>Facility/Group Management and Supervision</li> </ul>	
	<ul> <li>Contact and Use of External Support Services</li> </ul>	
	Event Classification	
	<ul> <li>State and Local Event Notification</li> </ul>	
	ERF Communications	
	Facility Activation	
	Facility Operation	
	<ul> <li>Backup and Alternative Facilities</li> </ul>	
	<ul> <li>Accident Detection and Assessment</li> </ul>	
	<ul> <li>Effluent Release and Dose Assessment</li> </ul>	
	<ul> <li>OSC Team Priorities, Dispatch and Control</li> </ul>	
	Site Evacuation	
	ERO Radiological Protection	
	Offsite Protective Action     Recommendations	
	Emergency Exposure	
	Contamination Control Measures	
	Decontamination	
	Recovery	
	I. Security Liaison	
	Organizational Interface and	

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Coordination  • Use of Medical, Fire and Law Enforcement Support  • NRC Notification and Communications	
Backup and Alternative Facilities OSC Team Priorities, Dispatch and Control Site Assembly and Accountability Site Evacuation  Operations Support Center (OSC)  A. Lead OSC Supervisor Facility/Croup Management and Supervision ERR Communications Facility Activation Facility Activation Facility Operation Backup and Alternative Facilities OSC Team Priorities, Dispatch and Control Site Evacuation ERO Radiological Protection Radiation Protection Briefings First Aid Recovery B. FixI-Now (FIN) Supervisor Facility/Croup Management and Supervision Contact and Use of External Support Services Facility/Activation Backup and Alternative Facilities Accident Detection and Assessment OSC Team Priorities, Dispatch and Control	

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# Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	C. Maintenance (Mechanical, Electrical and I&C)	
	OSC Team Priorities, Dispatch and	
	Control	
	D. Radiation Protection Technician	
	Radiological Monitoring Activities	
	<ul> <li>OSC Team Priorities, Dispatch and Control</li> </ul>	
	<ul> <li>ERO Radiological Protection</li> </ul>	
	<ul> <li>Emergency Exposure</li> </ul>	
	<ul> <li>Contamination Control Measures</li> </ul>	
	<ul> <li>Decontamination</li> </ul>	
	<ul> <li>Radiation Protection Briefings</li> </ul>	
	E. Radiation Protection Qualified Individual	
	<ul> <li>Radiological Monitoring Activities</li> </ul>	
	<ul> <li>OSC Team Priorities, Dispatch and</li> </ul>	
	Control	
	<ul> <li>ERO Radiological Protection</li> </ul>	
	Emergency Exposure	
	<ul> <li>Contamination Control Measures</li> </ul>	
	<ul> <li>Decontamination</li> </ul>	
	<ul> <li>Radiation Protection Briefings</li> </ul>	
	4. Emergency Operations Facility (EOF)	
	A. <u>EOF Manager</u>	
	<ul> <li>Organizational Interface and Coordination</li> </ul>	
	<ul> <li>Continuous Emergency Response Operations</li> </ul>	
	<ul> <li>Facility/Group Management and Supervision</li> </ul>	
	<ul> <li>Contact and Use of External Support Services</li> </ul>	
	<ul> <li>Integration of Offsite Agency Personnel in the ERF</li> </ul>	
	Dispatch and Control of Offsite EOC Liaisons	

# Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	ERF Communications	
	Facility Activation	
	Facility Operation	
	Site Evacuation	
	<ul> <li>Recovery</li> </ul>	
	B. <u>EOF Radiation Protection Coordinator</u>	
	<ul> <li>Facility/Group Management and Supervision</li> </ul>	
	<ul> <li>Integration and Use of the Radiological Laboratory</li> </ul>	
	Facility Operation	
	Accident Detection and Assessment	
	Effluent Release and Dose Assessment	
	<ul> <li>Radiological Monitoring Activities</li> </ul>	
	Offsite Protective Action	
	Recommendations	
	Radiation Protection Briefings	
	Post-Accident Environmental Sampling	
	C. <u>Field Monitoring Team Technician</u>	
	Facility Activation	
	Radiological Monitoring Activities	
	D. <u>Field Monitoring Team Driver</u>	
	Facility Activation	
	Radiological Monitoring Activities	
	E. <u>EOF Dose Assessor</u>	
	NRC Notification and Communications	
	ERF Communication	
	Facility Activation	
	Facility Operation	
	Effluent Release and Dose Assessment	
	Offsite Protective Action     Recommendations	
	F. Remote Dose Assessor – Remote position	
	supervised by EOF RP Coordinator	

Effluent Release and Dose Assessment     Offsite Protective Action Recommendations     Joint Information System (JIS) / Joint Information Center (JIC)     NextEra Corporate Communications and key business units maintain a staff to operate a Joint Information System.     Refer to Sections H.5 and G for JIC/JIS details.     A. Site JIS Manager	#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
Personnel      Media Monitoring     Rumor Control	#	Current Emergency Plan	Effluent Release and Dose Assessment     Offsite Protective Action Recommendations  5. Joint Information System (JIS) / Joint Information Center (JIC) NextEra Corporate Communications and key business units maintain a staff to operate a Joint Information System. Refer to Sections H.5 and G for JIC/JIS details. A. Site JIS Manager     Facility/Group Management and Supervision     Integration of Offsite Agency Personnel in the ERF     ERF Communications     Media Briefings     Facility Activation B. Site JIS Coordinator     Media Briefings     Accommodation of News Media     Personnel     Facility Activation     Facility Operation C. Remote JIS Manager—Remote interface position to the corporate JIS     Facility/Group Management and Supervision     ERF Communications     Media Statements     Media Briefings	
1. Plant Operations and Assessments of The CEP and Annexes are	107.	C. Functional Areas of Emergency Activity	<ul> <li>Accommodation of News Media         Personnel     </li> <li>Media Monitoring</li> </ul>	Non-RIE

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50.47(b) outline.
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s the functional areas
activities, and lists the
s (on-shift and
esponders) for those
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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Corrective Actions and Support of Operational		
	Accident Assessment		
	The Shift Technical Advisor will provide the initial		
	technical support necessary for repair, corrective		
	actions, and operational accident assessment.		
	6. Firefighting		
	The Fire Brigade provides first line response to a fire		
	on- site. The Fire Brigade is under the direction of the		
	Fire Brigade Leader. The St. Lucie County - Ft. Pierce		
	Fire District can respond to fires on-site, if requested.		
	7. Rescue Operations and First Aid		
	A. Rescue Operations involve the First Aid		
	Team and Radiation Protection personnel as		
	necessary. Under the control of the Emergency		
	Coordinator/TSC Radiation Protection Supervisor,		
	entry to potentially hazardous areas will be made by		
	the First Aid Team with assistance from Radiation		
	Protection personnel. Upon notification of the injury, the team will respond per the Emergency		
	Coordinator's instructions.		
	B. An Operations Department representative		
	(either an operator or chemist), trained in first aid will		
	act as the on-shift team leader for the First Aid Team.		
	Operations Department personnel, trained in first aid,		
	serve as the First Aid Team members and will be the		
	primary care provider.		
	8. Access Control and Personnel Accountability		
	The TSC Security Supervisor will ensure personnel		
	control and accountability. It is estimated that		
	personnel accountability can be accomplished within		
	30 minutes following the declaration of an evacuation		
	by the EC. Notification of occupants in the Owner		
	Controlled Area, outside the Protected Area, will be		
	accomplished by security sweeps.		
	9. Repair and Damage Control		
	Repair and damage control will be performed by		
	assigned teams. These teams may be composed of		
	members from any plant discipline and may be		
	augmented by non-Florida Power & Light Company		

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	support personnel. Under the direction of the Emergency Coordinator or his/her designee, these teams are used to mitigate the consequences of the accident and to help restore the normal operation of the plant. Actions include, but are not limited to, the movement and set-up of portable shielding, tools, emergency equipment, the repair of equipment and the operation of plant systems.		
108.		[CEP – B.1.b]	Non-RIE
		The NextEra ERO includes remote response positions. Remote response positions are not required to physically manipulate plant equipment or take other physical actions at the site. Remote response positions are provided the resources to collaborate with ERO personnel in their assigned emergency facility. These resources provide;  • the ability to communication audio/visually between emergency facility and the remote responder.  • the ability to access procedures, information and data.  • the ability to share screens/documents. ERO members responding remotely to an emergency are capable of performing all functions and tasks assigned to their position, including support provided to other ERO members, as described in the emergency plan and implementing procedures. These positions support the on-shift staff prior to activation of the TSC and EOF.	The CEP and Annexes are formatted in a 50.47(b) outline.  Table B-1 lists the functional areas and their key activities, and lists the ERO positions (on-shift and augmenting responders) for those functions.  Remote positions are addressed to align with common emergency plan.
		Remote Responders Assigned to the TSC (refer to Section B.1.a.2)  The Reactor Engineer, Electrical/I&C Engineer, and Mechanical Engineer ERO minimum staff positions are remote responders assigned to the TSC.	
		NextEra provides a corporate facility that provides the equivalent resource capability as a backup for the remote ERO engineering positions.  2. Remote Responders Assigned to the EOF (refer	

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		to Section B.1.a.4) The Remote Dose Assessor ERO minimum staff position is assigned to the EOF. NextEra provides a corporate facility that provides the equivalent resource capability as a backup for the Remote Dose Assessor position. Additionally, the Shift Dose Assessor from another NextEra site are capable of supporting the affected site as a backup to the Remote Dose Assessor position.	
109.		[CEP – B.3] The ERO is composed of on-shift personnel located at the site at all times, and augmenting personnel (responding to their assigned emergency facility or remotely). Refer to Table B-1 for the on-shift and augmenting ERO staffing plan. Table B-1: On-Shift and Augmenting ERO Staffing Plan located here.	The CEP and Annexes are formatted in a 50.47(b) outline.  Table B-1 lists the functional areas and their key activities, and lists the ERO positions (on-shift and augmenting responders) for those functions.
110.	Initiating Action This phase is initiated by the Emergency Coordinator (EC). Notification by the EC provides the basis for mobilization of the Florida Power & Light Company Emergency Response Organization (ERO) as well as state, local, and federal emergency response organizations. Activation of FPL personnel proceeds to the degree necessary, as determined by the EC, in response to the severity of the emergency.  In an Alert or higher emergency, the Technical Support Center (TSC) and the Operational Support Center (OSC) shall become operational. The Emergency Operations Facility (EOF) shall become operational in a Site Area Emergency and/or General Emergency. Figure 2-5 shows the response organization that can develop during this period.	[CEP – E.1.1]  ERO Notification  The Emergency Director will direct or perform notification of the ERO for all emergency classification levels. ERO personnel report to their assigned emergency response facilities as directed. In the event of a security threat, personnel may be instructed to respond to alternative facilities, or seek cover if on-site.  The means for alerting and notifying ERO members are described in Element F.1.c.  [CEP – E.1.2]  ORO Event Notification  NextEra, in cooperation with the OROs, has established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes are made to PARs, a notification to the OROs is made within 15 minutes.  Receipt location of notification messages is site	Non-RIE  Notification of ERO, ORO and NRC expanded to provide detail consistent with the criteria of NUREG-0654 R2.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
#	Current Emergency Plan	specific. ORO notification locations are described in the site annexes.  [PSL Annex E.1]  State and Local Event Notification  The site-specific state and county entities (24/7 warning points) notified of a declared emergency at PSL are as follows:  State of Florida (State Watch Office)  St. Lucie County  Martin County  Department of Health Bureau of Radiation Control (via SWO)  [CEP - E.1.3]  NRC Event Notification  NextEra will notify the NRC using ENS as soon as possible after notification of the OROs, and not later than 60 minutes after event declaration.  An accelerated call to the NRC will be made immediately after notification of local law enforcement agencies (LLEAs), or within about 15 minutes of the recognition of the security-based threat (discovery of an imminent threat or attack against the site), to ensure the NRC is notified of safeguards events. The information provided in the accelerated NRC notification will be limited to the following:  Site name.  ECL if determined prior to the accelerated notification.  Nature of the threat and the attack status.  [CEP - E.1.b]  The capability to notify offsite response organizations and the NRC within the required time periods is	
		described above in Element E.1.	
111.	2.2 4. Key Emergency Operations Facility Positions Recovery Manager (RM) The RM is a senior manager who has knowledge of	See Analysis #1 and Analysis #2	Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	nuclear plant operations and design and who will be responsible for declaring the EOF operational and directing the Company's expanded emergency response organization in conjunction with the Emergency Coordinator. He/she has the authority to establish policy and to expend funds necessary to cope with any emergency situations that arise. The Recovery Manager reports initially to the EOF.  The following specific responsibilities are assumed by		commitments of the CEP.
	the RM in the EOF:  1. To provide support and data as necessary to		
	the Emergency Coordinator.  2. To obtain information on diagnosis and prognosis of the emergency, estimates of radioactive releases, prevailing meteorological conditions, projected radiological exposures, and recommended off-site protective actions.		
	3. To assume from the EC, the responsibility for communicating such information to and coordinating with off-site organizations, and the issuance of Protective Action Recommendations (PARs) for the public.		
	<ol> <li>To assure continuity of technical and administrative support, and material resources.</li> <li>To request additional support from FPL and others as necessary.</li> </ol>		
	6. To provide logistical support for emergency personnel (e.g., transportation, communications, temporary quarters, food, water and sanitary facilities in the field, and procurement of special equipment and supplies).		
	Joint Information Center Manager		
	The JIC Manager is a designated member of the		
	Emergency Response Organization. The JIC Manager operates from the Emergency Operations Facility. The JIC Manager will have the following responsibilities:		
	1. To serve as a public spokesperson for FPL if Corporate Communications is not designated as the		

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	spokesperson.  2. To disseminate available information from the RM to the news media and to provide periodic updates.  3. To work with federal, state and county public information representatives to effect joint releases and public appearances.  4. To provide for dispatching a company representative to the St. Lucie County and Martin County EOCs, if appropriate.  Emergency Security Manager (ESM)  The ESM is a company supervisor, manager, or specialist with security experience and will be responsible to the RM for providing liaison with county law enforcement and rescue agencies. The ESM also provides for and manages security personnel at the EOF/JIC.  Emergency Technical Manager (ETM)  The ETM is a manager or senior engineer with detailed knowledge of nuclear plant design and who will be responsible for providing technical support and information regarding engineering design for the plant.		
112.	Lines of Succession Lines of succession for the Recovery Manager and Managers of the Expanded Emergency Organization are controlled by procedures which are maintained by the site Emergency Preparedness Manager.		Non-RIE Line of succession clarified to provide detail consistent with the criteria of NUREG-0654 R2.
113.	Delegation Delegation authority is controlled by procedure.		Non-RIE CEP limits command and control and non-delegable functions to the SM and SED. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP. Addressed in Row 105

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
114.	2.3 Emergency Response Support and Resources This section describes the arrangements that Florida Power & Light Company has made for assistance to augment the Emergency Response Organization.		Editorial Wording removed. Section descriptions in the current plan replaced with planning standard wording. No added, removed or altered commitments or change of intent.
115.	1. Response Organization Representatives Florida Power & Light Company has provided facilities in the Emergency Operations Facility for representatives from FPL, state, local, and federal response organizations.	[CEP – H.3] The Emergency Operations Facility (EOF) provides a dedicated location for support of the site event response activities. The EOF is sized to accommodate ERO responders and NRC, FEMA, and state representatives.	Editorial Wording altered. No added, removed or altered commitments or change of intent.
116.	2. Radiological Laboratories Florida Power & Light Company has primary and backup radiological laboratory facilities on-site. A hot lab backup will be provided by portable equipment described in procedures. Environmental sampling will be augmented by the State's Radiological monitoring team and the Mobile Emergency Radiological Laboratory (MERL) within approximately three hours of activation. If required, the laboratory facilities at FPL's Turkey Point Plant can be used; appropriate arrangements will be made on an as-needed basis.	[CEP – C.4]  NextEra has radiological laboratories located at each site. The site laboratories are the central point for receipt and analysis of onsite samples and includes equipment for chemical and radiological analyses. The laboratories provide analyses of samples from plant systems. Environmental monitoring sample analysis is also performed on-site or arrangements are made with off-site facilities.  Site specific details for the radiological laboratories are described in the site annexes.  [PSL Annex C.4]  Florida Power & Light Company has primary and backup radiological laboratory facilities on-site. A hot lab backup will be provided by portable equipment described in procedures. Environmental sampling will be augmented by the State's Radiological monitoring team and the Mobile Emergency Radiological Laboratory (MERL) within approximately three hours of activation. A Florida DOF-BRC representative dispatched to the EOF will coordinate all State off-site field monitoring data and sample media. If required, the laboratory facilities at FPL's Turkey Point Plant can be used; appropriate arrangements will be made on an as-needed basis.	Editorial No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
117.		<ul> <li>[CEP - B.5]</li> <li>1. Institute of Nuclear Power Operations (INPO)         INPO has an emergency response plan that         enables it to provide the assistance in locating         sources of emergency personnel, equipment, and         operational analysis.</li> <li>2. Other External (non-NextEra) Support         Organizations         Other external (non-NextEra) support         organizations are not used to provide additional         personnel for positions on the NextEra ERO or to         perform an operational role. Other external (non-NextEra) support organizations that may be         requested to provide technical assistance are         described in the site annexes.</li> <li>[PSL Annex - B.5]         Other External Non-NextEra Support Organizations         A. Westinghouse: ABB/Combustion Engineering         (CE), now Westinghouse Electric, is the         Nuclear Steam Supply System vendor for the         St. Lucie Plant. Upon request, Westinghouse         Electric can supply emergency technical         services and resources as provided by the         Purchase Order listed in Appendix E.</li> <li>B. AECOM (previously URS and Washington         Group): AECOM is the Architect/Engineer for         the St. Lucie Plant. Upon request, URS         Corporation can supply emergency services</li> </ul>	Editorial  No added, removed or altered commitments or change of intent.
118.		[CEP – B.4] Figure B.4 identifies the interfaces between NextEra ERFs, NRC, OROs, and local support organizations. Figure B.4 inserted here in CEP.  Dependent upon the emergency, a near or on-site Incident Command Post (ICP) is established in coordination with local support organizations. The ICP will interface with the site security, and NextEra response facilities. Based on the event, NextEra provides the appropriate liaison (Security, Operations or Radiation Protection) to the ICP.	Non-RIE  Added wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format.  No added, removed or altered commitments or change of intent.

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	4. Support to Federal Assistance Teams The Recovery Manager has the authority to request Federal assistance. It is expected that such assistance will be provided primarily by the NRC. Also, FEMA may send a representative to the EOF for near-site coordination of federal resources. It is expected that NRC personnel will begin to arrive at the site within 6 hours after declaration of a Site Area Emergency or General Emergency. Requests for assistance from the Department of Energy's Savannah River Operations office in Aiken, South Carolina can be made by the State under the Federal Radiological Monitoring and Assessment Plan (FRMAP). Such requests are the responsibility of the Director of the Division of Emergency Management in consultation with the Department of Health. Federal assistance teams can achieve access to the plant area through the Stuart, Florida airfield, approximately one half hour from the plant. The company may assign an individual to meet such assistance teams and to escort them to the appropriate facilities, if necessary.	[CEP – A.3] Refer to Element B.1.a and Table B-1 for a list of key individuals responsible for command and control, alerting and notification, communications, public	Non-RIE  Removed specific detail of federal organizations contained in their respective plans and replaced with description of their organization's coordination for response to nuclear utility.
120.	Florida Power & Light has reserved adequate space and facilities for the staff of the NRC and FEMA at the EOF. Designated phone lines, workspace and support services (reproduction, office supplies, etc.) will be arranged through Florida Power & Light. Similar arrangements have been made in the TSC for the NRC. These provisions are routinely exercised and evaluated for adequacy by the NRC.	[CEP – C.1] The EOF contains dedicated work areas and logistics resources for federal and, depending on the site, state response personnel. Federal and state personnel respond to the EOF in accordance with their emergency response plans and procedures.	Editorial  No added, removed or altered commitments or change of intent.
121.		[CEP – C.2.a] The individual authorized to request assistance and resources from responding organizations is the Emergency Director. Refer to Element B.2.a for greater detail regarding command & control.	Non-RIE  Added wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format.  No added, removed or altered

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
			commitments or change of intent.
122.		[CEP – C.2.b] Refer to Elements A.1.a and A.4 for the description and details of the provisions made for additional assistance and resources.	Non-RIE  Added wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format.  No added, removed or altered commitments or change of intent.
123.		[CEP – C.2.c] Site access is controlled at all times by the Security organization in accordance with the site security plan and procedures. The TSC Security Liaison is responsible for coordination with site security personnel when site access is needed for non-badged response personnel at an Alert or higher emergency classification level.	Non-RIE Added wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format. No added, removed or altered commitments or change of intent.
124.		[CEP – C.2.d] Local support organizations may be called to assist onsite for events requiring firefighting, medical, or law enforcement. Immediate assistance with firefighting, medical, and law enforcement at the sites is initiated using pre-established site specific communications systems.  Agreements have been formally developed and documented through memorandums of understanding (MOUs), contracts, and/or letters of agreement (LOAs).  Refer to Element A.4 for details on agreements.	Non-RIE  Added wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format.  No added, removed or altered commitments or change of intent.
125.		[CEP – C.3] Coordination of response actions and exchange of information among Emergency Directors from appropriate response organizations is provided via pre-designated communication links between NextEra, the NRC, and ORO EOCs.	Non-RIE  Added wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format.  No added, removed or altered commitments or change of intent.
126.		[CEP – C.5] The Site Emergency Director in the TSC and the EOF Manager are the initial primary contact positions for	Non-RIE  Added wording to reflect a fleet common emergency plan with

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		the NRC site response team personnel sent to those facilities.	station annexes and align to NUREG-0654 R2 format.
		Consistent with 10 CFR 50 Appendix E, areas within the EOF and TSC are established for NRC site response teams that include:	No added, removed or altered commitments or change of intent.
		Space for members of an NRC site team.	
		Space for conducting briefings with emergency response personnel.	
		Communication with other NextEra and offsite emergency response facilities.	
		Access to plant data and radiological information.	
		Access to office equipment and supplies.	
127.		[CEP – C.5.a]	Non-RIE
		When an emergency occurs, ERO personnel will ensure ERDS operation as soon as possible but not later than one hour after an alert or higher emergency classification level is declared, in accordance with 10	Added wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format.
		CFR 50.72(a)(4).	No added, removed or altered commitments or change of intent.
128.		[CEP – C.5.b]	Non-RIE
		The ERO is capable of maintaining continuous communications with the NRC. When requested, open communication lines will be staffed by knowledgeable personnel to ensure efficient and	Added wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format.
		effective information flow.	No added, removed or altered commitments or change of intent.
129.	2.4 Emergency Facilities and Equipment		Editorial
	This section describes the facilities and equipment		Wording removed.
	that Florida Power & Light Company maintains in readiness for an emergency situation. Figure 2-6 shows the locations of the on-site facilities.		Section descriptions in the current plan replaced with planning standard wording.
			No added, removed or altered commitments or change of intent.
130.	1. Control Room		Non-RIE
	For any emergency response, the Control Room of the affected unit serves as the initial point of control. The Shift Manager (SM) stations himself in the		Control room design and capability governed by non-EP regulations and documented in the UFSAR.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
#	affected unit's Control Room when he/she assumes the role of Emergency Coordinator (EC). The EC can leave the Control Room if necessary, after a proper turnover to a qualified alternate EC, to make a personal assessment regarding plant safety.  The Control Rooms are designed to remain tenable under accident conditions described in the Updated Final Safety Analysis Report (UFSAR). All plant related operations are directed from the Control Room. Nuclear plant instrumentation, including area and process radiation monitoring system instrumentation, is provided in the Control Room to give early warning of a potential emergency and to provide for continuing indication of an emergency situation. The Control Rooms contain the controls and instrumentation necessary for operation of the reactor under normal and emergency conditions.  A supply of radiological emergency equipment is maintained in each of the Control Rooms. Table 2-3 provides an example list of emergency equipment maintained for the two Control Rooms and the Technical Support Center (TSC) use.  Each Control Room contains the necessary communications equipment for notifying on-site personnel and off-site authorities in the event of an accident. This includes the Hot Ring Down (HRD) telephone to the State Watch Office (SWO), EMnet (Satellite Communications System), Emergency Notification System (ENS) to the NRC Operations Center (in Maryland), commercial telephones, Florida Power & Light Company radio system, public address	Common Emergency Plan and Site Annex	NUREG-0654 R2 contains no element for a description of the control room as an emergency response facility.  ERO personnel, response related equipment and capabilities assigned to the control room are described in their associates planning standard element.
	system, portable radio sets (walkie-talkies), and a radio paging system. These systems are used as defined by procedure to accomplish the necessary notifications and communications.		
131.	3. Technical Support Center The company maintains an on-site Technical Support Center to provide the Control Room with in-depth diagnostic and engineering assistance without adding to congestion within the Control Room. The TSC	[CEP – H.1] The Technical Support Center (TSC) provides a dedicated location for management and technical support to operations personnel and to relieve the operations staff of emergency response actions and	Non-RIE  Command and Control remains in TSC in CEP which alters the role of the response actions performed by ERO personnel within the facility.

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interfaces with the EOF regarding those diagnostic and engineering decisions. This assistance can help determine the operational decisions that would be appropriate to best control and mitigate the consequences of the emergency. The TSC is located adjacent to the Unit 1 Control Room.

Activation of the Technical Support Center will be initiated by the Emergency Coordinator in the event of the TSC's primary functions include: an Alert, Site Area Emergency or General Emergency. Arrangements have been made to staff the TSC in a timely manner.

The Technical Support Center contains pertinent records and drawings.

The Technical Support Center has an emergency communications network similar to the Control Rooms. The TSC also has the NRC Emergency Telecommunications System (ETS).

#### **Common Emergency Plan and Site Annex**

communications not related to plant system manipulations. The TSC is sized to accommodate ERO responders and NRC representatives.

The TSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated,

- Provide ERO command & control
- Continued evaluation of event conditions
- Develop and issue offsite protective actions recommendations
- Develop ORO event notifications
- Provide ENS communications with the NRC
- Display and trend plant data
- Develop response priorities and mitigative actions
- Coordination of site emergency response actions
- Provide engineering support

Personnel in the TSCs are protected from radiological hazards, including direct radiation and airborne contaminants under accident conditions, with radiological habitability standards similar to the Control Room. To ensure adequate radiological protection, radiation monitoring equipment is located in the TSCs, or periodic radiation surveys are conducted. These systems indicate radiation dose rates while in use. In addition, potassium iodide (KI) is available to TSC personnel for use.

TSC has the capability to support the remote response of the ERO engineering positions.

[PSL Annex -- H.1]

The company maintains an on-site Technical Support Center to provide the Control Room with in-depth diagnostic and engineering assistance without adding to congestion within the Control Room. The TSC interfaces with the EOF regarding those diagnostic and engineering decisions. This assistance can

## **Change Type**

Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

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The state of the s	Ourient Lineigency i ian	help determine the operational decisions that would be appropriate to best control and mitigate the consequences of the emergency. The TSC is on the 62-foot elevation of the Unit 1 Reactor Auxiliary Building (RAB). The TSC is located adjacent to the Unit 1 Control Room and is enclosed in the same habitability envelope. The TSC has emergency communications equipment, pre-calculated emergency data, pertinent reports, plans, procedures and drawings available for use. Should the Unit 1 Control Room envelope require evacuation, alternate locations for the TSC have been identified as follows:  • South Service Building  • Nuclear Training Center.  [CEP – H.1]  The TSCs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.  Each TSC provides communications to the	Change Type
		Control Room, OSC, EOF, Corporate Headquarters, NRC, and OROs.	
132.		[CEP – H.2]	Non-RIE
	The company maintains an on-site Operational Support Center (OSC) to serve as an assembly point for auxiliary operators, radiation protection technicians, maintenance personnel, and other plant personnel available to support the emergency response. Required staff will be assigned to	The Operations Support Center (OSC) provides a dedicated location for coordinating and planning event response activities and for staging personnel and equipment. The OSC is sized to accommodate ERO responders.  The OSC is activated when minimum staffing	No functional changes are made to the OSC. Facility activation time is now tied to ERO response time requirements (refer to Table B-1) facility and personnel readiness. Refer to Analysis #1 and Analysis
	appropriate activities by the Emergency Coordinator or his/her designee.  Equipment that can be used by personnel dispatched from the OSC is stored in the South Service Building. Table 2-4 indicates the types of material and equipment stored there.	requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the OSC's primary functions include:  • Provide staging area for maintenance, operations, RP, and other support personnel	#2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Activation of the OSC will be initiated by the Emergency Coordinator. The OSC will be activated and in operation for an Alert, Site Area Emergency or General Emergency. Arrangements have been made to staff the OSC in a timely manner.  The OSC is maintained in the Outage Control Center on the second floor of the South Service Building. Telephone communications are maintained between the OSC and the Technical Support Center.	Provide for briefing, dispatch, and coordination of emergency response teams  Dosimetry (dose of legal record and self-reading capable of monitoring emergency radiation exposure), respiratory protection, radiation survey equipment, and RWPs are available to OSC personnel. In the event of a personnel contamination, decontamination will be performed in the area normally designated for this purpose.  Radiation and contamination levels in and around the OSC are assessed during emergencies.  Each OSC provides communications to the Control Room, TSC, and emergency response teams.  The OSCs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.  Site specific details of the primary and backup OSC are described in the site annexes.  ANNEX H.2  The OSC is maintained in the Outage Control Center on the second floor of the South Service Building.	
133.	4. Alternate Operational Support Center In the event that the OSC becomes uninhabitable, the Emergency Coordinator will designate an alternate location in accordance with procedures.	[PSL Annex H.2] In the event that the OSC becomes uninhabitable, the Emergency Coordinator will designate an alternate location in accordance with procedures.	No Change
134.	5. Emergency Operations Facility (EOF) The company maintains an Emergency Operations Facility from which evaluation and coordination of FPL activities related to an emergency can be carried out and from which FPL can provide information to federal, state, and local authorities. The Emergency Operations Facility is located at the intersection of State Route 712 (Midway Road) and I- 95 approximately 10 ½ miles west of the St. Lucie Plant. The EOF has sufficient space to accommodate the Florida Power & Light Company response	[CEP – H.3] The Emergency Operations Facility (EOF) provides a dedicated location for support of the site event response activities. The EOF is sized to accommodate ERO responders and NRC, FEMA, and state representatives.  The EOF is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the EOF's primary functions include:	Non-RIE Physical EOF is not changed. Command and Control remains in TSC in CEP which alters the role of the response actions performed by ERO personnel within the facility. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

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#### **#** Current Emergency Plan

organization and designated representatives of the federal, state, and local authorities. Alternate temporary locations for the Emergency Operations Facility may be designated by the Recovery Manager if a natural disaster or other (non-radiological) external event significantly affects the operational capability of the facility.

The Emergency Operations Facility has an emergency communications network including but not limited to, commercial (Bell) telephone lines, Hot Ring Down (HRD) phone, NRC ENS, NRC HPN, NRC counterpart links, EMnet (Satellite Communications System), and various Florida Power & Light Co. maintained radio systems. Essential, precalculated emergency data and pertinent reports and drawings are readily available.

The RM is responsible for declaring the EOF operational. The EOF is required to be in operation for a Site Area Emergency or General Emergency, but may go operational for an Alert. Arrangements have been made to activate the EOF in a timely manner.

These facilities collectively have the following characteristics: the capability for communication with the emergency operations facility, control room and plant security; the capability to perform offsite notifications; and the capability for engineering assessment activities, including damage control team planning and preparation, for use when onsite emergency facilities cannot be safely accessed during hostile action.

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- Change Type
- Coordinate emergency response activities with federal, state, and local authorities
- Coordinate support activities performed by personnel brought in to assist NextEra personnel
- Perform offsite dose assessment and field monitoring activities.
- Development of dose based offsite protective actions recommendations.
- Coordination of emergency response activities with federal, state, and local authorities.
- Coordination of radiological and environmental assessment activities with offsite agencies.
- Communicate with the NRC HPN line.
- Coordinate corporate support.
- Support site acquisition of external assistance (technical, craft, admin, etc.).
- Support site acquisition of equipment, supply, and logistic resources.

Because the EOF is located outside the plume exposure EPZ for all NextEra sites, specialized ventilation systems and radiological monitoring are not required. The EOF ventilation system is consistent in design with standard building codes. The EOF has the capability to support the remote

The EOF has the capability to support the remote response of ERO positions.

Site specific details of the EOF are described in the site annexes.

[PSL Annex -- H.3]

The Emergency Operations Facility is located at the intersection of State Route 712 (Midway Road) and I-95 approximately 10 ½ miles west of the St. Lucie Plant. The EOF has sufficient space to accommodate the Florida Power & Light Company response organization and designated representatives of the federal, state, and local authorities. Alternate temporary locations for the Emergency Operations Facility may be designated by the Recovery Manager if a natural disaster or other (non-radiological)

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		external event significantly affects the operational capability of the facility.  [CEP – H.3]  Each EOF provides communications to the Control Room, TSC, field monitoring teams, NRC, and OROs. The EOF has the capability for the acquisition, display, and evaluation of unit, radiological and meteorological conditions necessary to perform accident assessment and determine protective measures. The EOFs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.	
135.	The EOF serves as an alternate facility for the Technical Support Center and the Operations Support Center in a hostile action event at the station.	[CEP – H.4] An alternative facility provides a location for the staging of ERO personnel in the event of a Security or Hostile Action threat for each NextEra site. The alternative facility may also serve as an evacuation location for TSC and OSC personnel should those facilities become uninhabitable. The alternative facility can communicate with the Control Room, site security, and EOF. The functions of offsite notification and PARs can be performed from the Alternative Facility. Emergency response team planning and preparation can be performed from the Alternative Facility. Site specific details of the alternative facilities are described in the site annexes. [PSL Annex H.4] The EOF serves as an alternative facility for the Technical Support Center and the Operations Support Center in a hostile action event at the station.	Non-RIE Revised wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format. No added, removed or altered commitments or change of intent.
136.	6. Joint Information Center (JIC) A Joint Information Center (JIC) is provided to allow the news media access to information from the Emergency Operations Facility. The JIC is co-located with the EOF (Midway Road/I-95 intersection).	[CEP – H.5] A near-site JIC (outside the 10 mile EPZ) is established for each site. ERO staffing of the JIC is concurrent with other ERFs, although facility activation is coordinated with the joint offsite agencies	Non-RIE  No functional changes are made to the JIC.  Refer to Analysis #1 and Analysis #2 for a detailed comparison

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		and has no time requirement.	evaluation of the ERO positions,
		When activated the JIC functions as a physical location for interacting with the media and for coordination between NextEra, federal and ORO PIOs regarding communications information to the public and the media.  NextEra provides space and equipment at their corporate facility to provide coordination of public information response activities with site and corporate JIS/JIC personnel.  Site specific details of the JICs are described in the site annexes.  [PSL Annex H.5]  A Joint Information Center (JIC) is provided to allow the news media access to information from the Emergency Operations Facility. The JIC is co-located with the EOF (Midway Road/I-95 intersection).  When activated during and event, the near-site JIC is staffed by site personnel. The near site JIC is designed to facilitate representatives from county, state and federal agencies, as well as members of	functions/tasks, and response time commitments of the CEP.
		the media.	
137.	7. St. Lucie County Emergency Operations Center The St. Lucie County EOC will be the point from which county response activities will be controlled. The facility is located at 15305 W. Midway Rd., Ft. Pierce, Florida. Communications include Hot Ring Down (HRD) phone, EMnet (Satellite Communications System), teletype, police department and fire department networks, and commercial telephone.		Non-RIE Removed wording. ORO EOC descriptions are contained in their respective E-Plans. Communications capabilities from the site to offsite OROs described in other sections.
138.	8. Martin County Emergency Operations Center The Martin County EOC will be the point from which county response activities will be controlled. This facility is located at 800 S.E. Monterey Road, Stuart, Florida. Communications include Hot Ring Down (HRD) phone, EMnet (Satellite Communications System), teletype, police department and fire		Non-RIE Removed wording. ORO EOC descriptions are contained in their respective E-Plans. Communications capabilities from the site to offsite OROs described

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	department networks, and commercial telephone.		in other sections.
139.	9. Florida State Emergency Operations Center (State Watch Office) The State's initial response comes from the State Emergency Operations Center (EOC) in Tallahassee. Initial notification goes to the State Watch Office (SWO) located in the State EOC. The location is 2555 Shumard Oak Boulevard, Tallahassee, Florida. Communications include Hot Ring Down (HRD), EMnet (Satellite Communications System), teletype and telephone. This facility is manned 24 hours a day by a duty officer.		Non-RIE Removed wording. ORO EOC descriptions are contained in their respective E-Plans. Communications capabilities from the site to offsite OROs described in other sections.
140.	2.5 Medical and Health Support This section describes the agreements and provisions that Florida Power & Light Company has made for emergency medical support.		Editorial Wording removed. Section descriptions in the current plan replaced with planning standard wording. No added, removed or altered commitments or change of intent.
141.	1. Plant First-Aid Facilities The First-Aid Rooms on the ground floor of the Auxiliary Buildings are provided with first-aid supplies. The medical supplies in the First- Aid Rooms are checked on a two month basis and replenished as necessary. In addition, standard 24-unit First-Aid Kits are maintained at numerous locations throughout the St. Lucie Plant. The First-Aid Kits are checked once every two months and replenished as necessary. A commercial First-Aid Kit is maintained in the Site Assembly Station.	[CEP – L.2.a] On-shift first aid personnel will provide first aid to individuals who are injured. Radiation protection personnel will provide contamination control support to potentially contaminated injured personnel.  NextEra maintains first aid supplies, and equipment for the treatment of injured or contaminated injured persons. Descriptions of equipment and supplies, and radiological monitoring and decontamination equipment and supplies are in site procedures.	Non-RIE First Aid capabilities and equipment for industrial facilities are governed under other (non part 50) regulations. The CEP acknowledges that the site maintains such a capability and its resources, but does not document specific commitments covered by the separate requirements. This change is consistent with NUREG-0654 R2 regarding reference to first aid in the E-Plan.
142.	Personnel decontamination washrooms and shower rooms are provided on the ground floor of the Auxiliary Buildings. Accepted decontamination practices will be employed on-site and are described in a Radiation Protection procedure.	[CEP – L.2.d] Injured personnel are evaluated for radiological contamination prior to transport to a medical facility per site procedures. If contamination monitoring is not possible due to the medical condition of the	Non-RIE Reworded to align with CEP. No functional changes are made.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		individual, contamination monitoring is performed as soon as possible following treatment at the medical facility.	
143.	Life endangering injuries such as extensive burns, serious wounds or fractures shall receive prompt medical attention at off-site support medical facilities. Personnel with injures involving radiation or radioactive contamination can also be handled by these off-site support medical facilities. The off-site support medical facilities are Lawnwood Regional Medical Center in Ft. Pierce, Fl., and Martin Memorial Medical Center in Stuart, Fl.  Both of these medical facilities are equipped and staffed with physicians and nurses capable of treating a contaminated injured individual(s). The physicians will provide for medical examinations, treatment, and laboratory services for those employees and other persons, designated by Florida Power & Light Company, who have been involved in a radiation accident.	[CEP – L.2.b]  Arrangements have been made with local hospitals for the medical treatment of contaminated injured or over exposed personnel. These facilities and their services are available 24 hours per day.  Offsite medical facilities used to treat contaminated injured personnel are described in the site annexes.  [PSL Annex L.2.b]  The two offsite medical facilities to treat contaminated, injured personnel from PSL are:  Lawnwood Regional Medical Center in Ft. Pierce, Fl. The Lawnwood Regional maintains a facility equipped to provide first aid, emergency medical stabilization treatment, and decontamination for ill or injured personnel from plant. It is available 24 hours a day, and is equipped with a sink, decontamination supplies, protective clothing, signs, and other necessary equipment.  Cleveland Clinic Martin Health in Stuart, Fl. may be utilized if the treatment required extend beyond the capabilities of the Lawnwood Regional Medical Center.	Non-RIE Reworded to align with CEP. No functional changes are made'
144.	The patient receiving areas are equipped for patient decontamination and the performance of emergency medical procedures for life- saving purposes. Additionally, these facilities have intensive care units available for the treatment of decontaminated radiation accident casualties or persons who have received only internal radiation exposure. Both facilities are available on a 24-hour basis.	[CEP – L.2.c]  NextEra personnel are available to assist medical personnel with decontamination, radiation exposure monitoring, and contamination control.  Radiological controls capability, including the isolation of contamination, assessment of contamination levels, radiation exposure monitoring for medical facility staff, collection of contaminated waste, and decontamination of treatment areas are described in hospital procedures.	Non-RIE Reworded to align with CEP. No functional changes are made'
145.	Plant First-Aid Facilities (continued) Backup Facility A letter of agreement between the Oak Ridge	[CEP – L.2.e] The Radiation Emergency Assistance Center Training Site (REAC/TS) located at Oak Ridge, Tennessee,	Editorial  No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Associated Universities (ORAU) and Florida Power & Light Company provides backup support for the definitive care and treatment of seriously irradiated persons. The ORAU Medical and Health Sciences Division operates the Radiation Emergency Assistance Center/Training Site (REAC/TS) in Oak Ridge, Tennessee, for the U.S. Department of Energy. It studies radiation and radioactive materials in diagnosis, therapy, and research. Its specialized facilities are available for the care and treatment of possible radiation accident victims.	will respond to and/or provide advice and assistance to offsite medical facilities in the event of a severe radiation accident.	
146.	2. Transportation of Injured Personnel St. Lucie County-Ft. Pierce Fire District Rescue service, company, or private vehicle will provide transportation of personnel with injuries whether or not the injury is associated with radiation or contamination. The fire district rescue service is preferred, but in the case of injuries which require urgent transportation or external exposure without contamination, other transportation may be used.	[CEP – L.4] Injured personnel are evaluated for radiological contamination and packaged to control contamination prior to transport to a medical facility per radiation protection department procedures. NextEra personnel will assist with decontamination of transport vehicles if necessary.  Transportation agreements for contaminated injured personnel are described in site annexes. [PSL Annex L.4] St. Lucie County Fire District Rescue service, company, or private vehicle will provide transportation of personnel with injuries whether or not the injury is associated with radiation or contamination. The fire district rescue service is preferred, but in the case of injuries which require urgent transportation or external exposure without contamination, other transportation may be used.	Non-RIE  Additional content included to address the level of detail of the NUREG-0654 R2 elements.
147.	3. Communications When injured personnel are transported to an off-site medical facility by county ambulance, radio contact, as well as telemetry, is normally maintained between the facility and the ambulance. In accordance with procedures, telephone notification is made by the Plant to the medical facility concerning the pending arrival of an injured person(s).	[CEP – F.2] Communications methods have been coordinated with medical facilities (ambulance and hospital). Site specific communications systems used for hospital and ambulance coordination are described in the site annexes.  [PSL Annex F.2] When injured personnel are transported to an off-site medical facility by county ambulance, radio contact, as well as telemetry, is normally	Editorial Content reworded. Communications systems details documented in section F.1.a. No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		maintained between the facility and the ambulance. In accordance with procedures, telephone notification is made by the Plant to the medical facility concerning the pending arrival of an injured person(s).	
148.	FIGURE 2-1, FPL EMERGENCY RESPONSE CAPABILITY		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed figure. ERO description provided in Section B.1.a and Table B-1. NUREG-0654 R2 does not require an ERO figure.
149.	FIGURE 2.3, ST. LUCIE PLANT NORMAL OPERATING ORGANIZATION		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed figure. Normal organization information provided in Section B.1.a. NUREG-0654 R2 does not require a normal organization figure.
150.	FIGURE 2.4,ON-SHIFT EMERGENCY RESPONSE CAPABILITY		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed figure. ERO description provided in Section B.1.a and Table B-1. NUREG-0654 R2 does not require an ERO figure.
151.	FIGURE 2-5, EXPANDED RESPONSE ORGANIZATION		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed figure. ERO description provided in Section B.1.a and Table B-1. NUREG-0654 R2 does not require an ERO figure.
152.	FIGURE 2-6, ST. LUCIE PLANT ON-SITE EMERGENCY FACILITIES LOCATION MAP		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline.

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Removed figure. ERF description provided in Section H. NUREG- 0654 R2 does not require an ERF figure.	#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
FOR A TWO UNIT SITE WITH SEPARATE CONTROL ROOMS  Planj The CEP has updated. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERQ positions, functions/tasks, and response time commitments of the CEP.  TABLE 2-2, FLORIDA POWER & LIGHT EMERGENCY RESPONSE ORGANIZATION FUNCTIONS AND RESPONSIBILITIES  [Table B-1, On-Shift and Augmenting ERO Staffing Plan]  The CEP has updated. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERQ positions, functions/tasks, and response time commitments of the CEP.  The CEP has updated. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERQ positions, functions/tasks, and response time commitments of the CEP.  Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed table. CEP provides description of capabilities. Specific equipment used to fulfill those capabilities are contained in EPIPs. NUREG-0654 R2 does not require a typical list of kit content.  Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed table. CEP provides description of capabilities. Specific equipment in a formatted in a 50.47(b) outline. Removed table. CEP provides description of capabilities. Specific equipment is a formatted in a 50.47(b) outline. Removed table. CEP provides description of capabilities are contained in EPIPs. NUREG-0654 R2 does not require a typical list of kit content.				provided in Section H. NUREG- 0654 R2 does not require an ERF
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I Section 3.0. Emergency Classification System		Section 3.0, Emergency Classification System		a typical not of the content.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
157.	The system which has been adopted for categorizing off-normal events or conditions at the Plant has four classes. In order of increasing severity, these are: Notification of Unusual Event, Alert, Site Area Emergency, and General Emergency.	[CEP – D.1]  NextEra has established and maintains a standard emergency classification level scheme. The EAL technical basis manual is referenced in the site annexes. The spectrum of postulated emergency events is categorized into the following four (4) emergency classification levels (ECLs):  Unusual Event  Alert  Site Area Emergency  General Emergency  The four ECLs are described as follows:  ANNEX D.1  The PSL EAL scheme is documented in EP-PSL-121, PSL Emergency Action Level Technical Basis Document.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Section purpose descriptions replaced with planning standard wording. No added, removed or altered commitments or change of intent.
158.		[CEP – D.3]  NextEra maintains procedures that include immediate actions to be taken that are consistent with any declared ECL.  Emergency Operating Procedures provide instructions to Control Room personnel to assist in mitigating the consequences of a broad range of accidents and multiple equipment failures. These procedures are based on guidelines developed by the owners' groups.  Emergency plan implementing procedures provide instructions to ERO personnel for response activities primarily associated with assessment, classification, notification and protective actions. Other functions such as communications, termination and recovery are also addressed.  A summary of response actions taken at each ECL is as follows:	Non-RIE  Wording added to align with CEP. The CEP and Annexes are formatted in a 50.47(b) outline. Section purpose descriptions replaced with planning standard wording.
159.	3.1 Notification of Unusual Event Events are in process or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility	[CEP – D.1.1] <u>Unusual Event (UE)</u> Events are in progress or have occurred which	Non-RIE ECL definition unchanged. Action summary simplified to key

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## # Current Emergency Plan

protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.

- Assess and respond as directed by the **Emergency Coordinator.**
- Report the Unusual Event to off-site authorities (FPL and non-FPL) in accordance with plant procedures.
- Provide plant status updates in accordance with plant procedures.
- Close out by verbal summary to off-site authorities, or escalate to a higher class.

# **Common Emergency Plan and Site Annex**

indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.

[CEP - D.3.1]

# Unusual Event (UE)

- Initial and follow-up event notification to the OROs and NRC.
- Notification of ERO personnel. This is an information only notification and does not require activation of emergency facilities or response organizations. Any Emergency Response Facility (ERF) may be activated at the discretion of the Emergency Director.

# **Change Type**

activities and reference to further details in the EPIPs.

No added, removed or altered commitments or change of intent.

#### **160.** 3.2 Alert

Events are in process or have occurred which involve | Alert an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION. Any releases are expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.

FPL actions in response to this category will be:

- Assess and respond as directed by the **Emergency Coordinator.**
- The Emergency Coordinator will augment resources by activating the on-site Technical Support Center and Operational Support Center.
- Report the Alert status to off-site authorities (FPL and non-FPL) in accordance with plant procedures.
- Dispatch monitoring teams as directed by the TSC Radiation Protection Supervisor.
- Provide periodic plant status updates in accordance with plant procedures, typically every sixty minutes or upon significant change in

# [CEP - D.1.2]

Events are in progress, or have occurred, which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable lifethreatening risk to site personnel or damage to site equipment because of hostile action. Any releases are expected to be small fractions of the EPA Protective Action Guideline exposure levels.

[CEP - D.3.2]

## Alert

- Initial and follow-up event notification to the OROs and NRC.
- Augmentation of the shift ERO (refer to Element A.1.a) by activating the Technical Support Center, Operations Support Center and Emergency Operations Facility.
- The Joint Information System shall be established at this ECL, with Joint Information Center activation determined in coordination with the offsite agencies.

#### Non-RIE

ECL definition unchanged. Action summary simplified to key activities and reference to further details in the EPIPs. No added. removed or altered commitments or change of intent.

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#### # Current Emergency Plan

- plant conditions.
- 6. Provide periodic meteorological assessments in accordance with plant procedures if releases are anticipated or occurring. If releases are occurring, provide dose estimates for actual releases.
- Close out by verbal summary to off-site authorities, followed by a written summary within 24 hours, or escalate to a higher class.

# **Common Emergency Plan and Site Annex**

If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.

## Change Type

#### **161.** 3.3 Site Area Emergency

Events are in process or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public or HOSTILE ACTION that results in intentional damage or malicious acts:

- toward site personnel or equipment that could lead to the likely failure of or; (2) that prevent effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels beyond the site boundary.
- FPL actions in response to this category will be:
- 1. Assess and respond as directed by the **Emergency Coordinator.**
- 2. Augment resources as necessary by activating the on-site Technical Support Center, the on-site Operational Support Center, and the Emergency Operations Facility.
- Report the Site Area Emergency status to offsite authorities (FPL and non-FPL) in accordance with plant procedures.
- Dispatch monitoring teams as directed by the TSC Radiation Protection Supervisor.
- Provide periodic plant status updates in accordance with plant procedures, typically every sixty minutes or upon significant change in plant conditions.
- Provide periodic meteorological assessments in accordance with plant procedures.

# [CEP - D.1.3]

# Site Area Emergency (SAE)

Events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public or hostile action that results in intentional damage or malicious acts; 1) toward site personnel or equipment that could lead to the likely failure of or; 2) that prevent effective access to, equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA PAG exposure levels beyond the site boundary.

## [CEP - D.3.3]

# Site Area Emergency

- Initial and follow-up event notification to the OROs and NRC.
- Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.
- The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).
- Implementation of onsite protective actions (refer to Section J).
- If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.

# **Non-RIE**

ECL definition unchanged.

Action summary simplified to key activities and reference to further details in the EPIPs. No added. removed or altered commitments or change of intent.

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### # Current Emergency Plan

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# **Change Type**

- 7. Provide release and dose projections based on available plant and meteorological information and foreseeable contingencies.
- Close out or recommend a change in emergency class when appropriate by briefing off-site authorities.
- Submit a brief written summary to off-site authorities within 24 hours after closing out the emergency.

Offsite precautionary actions may be recommended under certain conditions (as required by site specific OROs).

#### 3.4 162. General Emergency

Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or HOSTILE ACTION that results in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.

FPL actions in response to this category will be:

- 1. Assess and respond as directed by the **Emergency Coordinator.**
- 2. Augment resources by activating the on-site Technical Support Center, the on-site Operational Support Center, and the Emergency Operations Facility.
- 3. Report the General Emergency status to off-site authorities (FPL and non-FPL) in accordance with plant procedures.
- 4. Dispatch monitoring teams as directed by the TSC Radiation Protection Supervisor.
- 5. Provide periodic plant status updates in accordance with plant procedures, typically every sixty minutes or upon significant change in plant conditions.
- 6. Provide periodic meteorological assessments in accordance with plant procedures.
- 7. Provide release and dose projections based on available plant and meteorological information and foreseeable contingencies.

# [CEP - D.1.4]

#### General Emergency (GE)

Events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or hostile actions that result in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA PAG exposure levels offsite for more than the immediate site area.

#### [CEP - D.3.4]

# General Emergency

- Initial and follow-up event notification to the OROs and NRC.
- Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.
- The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).
- Implementation of onsite protective actions (refer to Section J) if not previously performed.
- If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.
- Offsite protective action recommendations are communicated to the OROs and NRC.

# **Non-RIE**

ECL definition unchanged.

Action summary simplified to key activities and reference to further details in the EPIPs. No added. removed or altered commitments or change of intent. No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	<ol> <li>Provide off-site protective action recommendations to the State DEM.</li> <li>Close out or recommend a reduction in emergency class when appropriate by briefing off-site authorities.</li> <li>Submit a brief written summary to off-site authorities within 24 hours after closing out the emergency.</li> </ol>		
163.	The Shift Manager (SM) uses the Emergency Action Levels (EALs) to evaluate plant conditions requiring declaration of an Emergency Class and initiation of the Emergency Plan. The EALs, listed in Appendices A, B and C, are grouped into Recognition Categories depending on the nature of the initiating condition and the impact on plant operation and safety.  As the condition(s) of the plant degrade(s), increasing Emergency Action Levels are reached resulting in a higher (greater severity) class of emergency being declared. Fifteen (15) minutes should not be exceeded for assessing and classifying an emergency once indications (Emergency Action Levels (EALs) / thresholds) are available to Plant Operators that an Initiating Condition (IC) has been met and/or exceeded.  For EALs that are time-based, a prescribed assessment period is provided. It is to be acknowledged that the condition described in the EAL has been met if the stated time period elapsed. There is not an additional 15 minute assessment period.  Tables 3-2 and 3-3 contain listings of Process and Effluent Monitors and Area Radiation Monitors that may be used to initiate emergency actions. These tables contain information regarding the type of monitor, range of the instruments, and typical setpoints (actual setpoints are defined by procedure). Table 3-4 contains a listing of non-radiological monitors, meters, or gauges that may be used to initiate emergency actions. This table contains	[CEP – D.1.a] Emergency Action Levels (EALs) at NextEra sites have been developed in accordance with NRC endorsed guidance. This guidance and the NextEra site EAL schemes have been approved by the NRC. If the entire EAL scheme is to be changed, then the new EAL scheme will be submitted to the NRC for approval prior to implementation. [CEP – D.1.b] The NRC approved NextEra EAL schemes have been agreed to by the OROs associated with the site. The current EAL scheme is reviewed with the sites' respective OROs on an annual basis. [CEP – D.2] NextEra has and maintains the capability to assess, classify, and declare an emergency condition within 15 minutes after the availability of indications to plant operators that an EAL threshold has been met or exceeded. Details for classification timeliness criteria are documented in the site specific EAL Technical Bases Document.	Non-RIE  The CEP and Annexes are formatted in a 50.47(b) outline.  Content describing EALs is included in the EAL TBD. Process for EAL changes is detailed in 50.54(q) evaluation EPIP.  Commitment to 50.54(q) described in Section P.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	information regarding the parameter measured and		
	the range of the monitor, meter, or gauge.		
164.	An act toward a Nuclear Power Plant (NPP) or its personnel that includes the use of violent force to destroy equipment, takes hostages, and/or intimidates the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. HOSTILE ACTION should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the NPP. Non-terrorism-based EALs should be used to address such activities, (e.g., violent acts between individuals in the owner controlled area).		Wording removed. The CEP and Annexes are formatted in a 50.47(b) outline. Content describing EALs is included in the EAL TBD. Process for EAL changes is detailed in 50.54(q) evaluation EPIP. Commitment to 50.54(q) described in Section P. Hostile action descriptions are addressed in several sections of the CEP.
165.	3.7 Hostile Force One or more individuals who are engaged in a determined assault, overtly or by stealth and deception, equipped with suitable weapons capable of killing, maiming, or causing destruction.		Non-RIE  Wording removed. The CEP and Annexes are formatted in a 50.47(b) outline.  Content describing EALs is included in the EAL TBD. Process for EAL changes is detailed in 50.54(q) evaluation EPIP.  Commitment to 50.54(q) described in Section P. Hostile action descriptions are addressed and defined in several sections of the CEP.
166.	TABLE 3-2A, ST. LUCIE UNIT 1 PROCESS AND EFFLUENT RADIATION MONITORS USED FOR ACCIDENT ASSESSMENT		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. EAL related PRMs (effluent monitors are PRMs) are included in the EAL TBD.
167.	TABLE 3-2B, ST. LUCIE UNIT 2 PROCESS AND EFFLUENT RADIATION MONITORS USED FOR		Non-RIE The CEP and Annexes are

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	ACCIDENT ASSESSMENT		formatted in a 50.47(b) outline. EAL related PRMs (effluent monitors are PRMs) are included in the EAL TBD.
168.	TABLE 3-3, ST. LUCIE 1 AND 2 AREA RADIATION MONITORS		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. EAL related PRMs (effluent monitors are PRMs) are included in the EAL TBD.
169.	TABLE 3-4, NON-RADIOLOGICAL INSTRUMENTATION USED FOR ACCIDENT ASSESSMENT		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. EAL related PRMs (effluent monitors are PRMs) are included in the EAL TBD.
	Section 4.0, Notification and Communications		
170.	This section describes the procedures and methods established for initial notification and follow-up communications with Florida Power & Light Company, and from Florida Power & Light Company to the appropriate state, county, and federal response organizations. Section 4.6, Communications Equipment, describes the referenced systems in more detail. Figure 1-2 shows the initial notification flow. Table 4-1 presents the organizational positions and alternates for the primary response organizations responsible for ensuring the manning of communications links.	[CEP – E] Procedures have been established for notification, by the licensee, of state and local response organizations and for notification of emergency personnel by all organizations; the content of initial and follow up messages to response organizations and the public has been established; and means to provide early notification and clear instruction to the populace within the plume exposure pathway EPZ have been established.  [CEP – F] Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.	Editorial CEP and site annex use Planning standard words as introductions to sections of the plan. No added, removed or altered commitments or change of intent.
171.	4.1 FPL Emergency Response Organization The FPL Emergency Coordinator, acting in accordance with plant procedures, has the responsibility to make the necessary notifications and communications, and for determining the content of the notification. However, actual contacts may be made by	[CEP – B.1.a] The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):  1. Control Room (CR)	Editorial  No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	designated communications assistants. The use of the phrase "Emergency Coordinator" below is also defined as "Emergency Coordinator or designated communicator," except for those items described in Section 2.2.2.2 which cannot be delegated.	<ul> <li>A. Shift Manager</li> <li>State and Local Event Notification</li> <li>Technical Support Center (TSC)</li> <li>A. Site Emergency Director</li> <li>State and Local Event Notification</li> <li>[CEP – B.2.a]</li> <li>The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level.</li> <li>Non-delegable responsibilities include the following:</li> <li>Event declaration</li> <li>ORO and NRC Notification</li> <li>PARs for the general public</li> <li>Emergency Exposure (Dose limits and KI)</li> </ul>	
172.	<ol> <li>Initial Notification</li> <li>Florida Power &amp; Light Company emergency procedures call for the following actions for initial notification within the FPL organization.</li> <li>Personnel detecting a potential significant offnormal event or condition should report it to the Shift Manager by the fastest means available. This may mean face-to-face communication, the plant public address system, or the commercial telephone system. These systems provide adequate means of redundancy for this initial notification.</li> <li>The following information should be related to the extent possible:         <ul> <li>Type of emergency (fire, pipe rupture, etc.).</li> <li>Location of emergency.</li> <li>Presence of injured personnel.</li> <li>Extent of damage to plant components.</li> </ul> </li> </ol>	Emergency Exposure (2000 minio director)	Non-RIE Removed action required by site personnel outside the Emergency Plan. Personnel are trained to report all off normal events.
173.	The Shift Manager directs the investigative actions to address the off-normal event. The Shift Manager classifies the event and if it is determined to be an Unusual Event, Alert, Site Area Emergency, or General Emergency, implements this Emergency	[CEP – D.2]  NextEra has and maintains the capability to assess, classify, and declare an emergency condition within 15 minutes after the availability of indications to plant operators that an EAL threshold has been met	Editorial  No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Plan and becomes the Emergency Coordinator.	or exceeded. Details for classification timeliness criteria are documented in the site specific EAL Technical Bases Document.	
174.	As necessary, the Emergency Coordinator notifies plant personnel of the emergency situation and any required protective actions by the Plant Public Address system. Activation of FPL personnel proceeds to the degree necessary, as determined by the EC, in response to the severity of the emergency. If necessary, the Emergency Coordinator directs the evacuation of all visitors and non-essential Florida Power & Light Company employees.	[CEP – B.1.a] The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):  1. Control Room (CR)  A. Shift Manager  • ERO Notification  2. Technical Support Center (TSC)  A. Site Emergency Director  • ERF Communications [CEP – F.1.c] Personnel within the Protected Area are notified of the emergency classification via the public address system. The sounding of alarms and announcement of the emergency classification and other pertinent data relating to the emergency classification are made over the public address system.  Notification of personnel located onsite, but outside the Protected Area, is accomplished through PA system announcements, administrative controls, and by Security personnel.  NextEra sites use an automated ERO notification system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location.  [CEP – J.1]  NextEra maintains procedures to provide for a range of protective actions for all areas controlled by the site. Protective actions have been developed for radiological incidents and to protect personnel during hostile actions directed at the site.	Editorial  No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		Sitewide notifications and announcements are routinely made using the Public Address (PA) system. Personnel on site are notified of a declared emergency through the PA system.  Visitors within the Protected Area are escorted by badged individuals. The escort is responsible for controlling and directing their assigned visitors regarding actions required by any announcements and alarms.  Security personnel are used, as available, to augment PA announcements and to check OCA areas for remaining individuals.  [CEP – J.4]  The emergency alarm, together with the public address system, is used to alert and notify on-site personnel of the need for assembly at a Site Area or General Emergency classification level (or earlier at the discretion of the Emergency Director).	
175.	<ol> <li>The Emergency Coordinator notifies the Shift Communicator (SC) by the most readily available communications system and provides basic information as described below and the status of his/her notification of off-site authorities. The SC notifies the Recovery Manager (RM) and appropriate response personnel by telephone, cellular phone, or beeper.</li> <li>The Emergency Coordinator provides the following information to the SC to the extent possible:         <ul> <li>Type of accident or incident</li> <li>Affected Unit</li> <li>Assessment of the emergency condition (including the class of emergency).</li> <li>Information on personnel injuries, and an estimate of personnel radiation exposures.</li> <li>Off-site support already called in and/or required.</li> <li>An estimate of the magnitude of a radioactive material release and the area possibly affected, if applicable.</li> </ul> </li> </ol>	[CEP – E.1] <u>ERO Notification</u> The Emergency Director will direct or perform notification of the ERO for all emergency classification levels. ERO personnel report to their assigned emergency response facilities as directed. In the event of a security threat, personnel may be instructed to respond to alternative facilities, or seek cover if on-site.  The means for alerting and notifying ERO members are described in Element F.1.c.	Non-RIE Wording removed to align with CEP. No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	<ul> <li>Actions already taken or recommended with respect to the evacuation of various on-site areas, if applicable.</li> <li>Meteorological information.</li> <li>Assessment of potential radiation exposure to persons off-site and any protective actions for off-site areas recommended, if applicable.</li> </ul>		
176.	3. Once the Emergency Operations Facility (EOF) is declared operational the Recovery Manager (RM) assumes responsibility for notification of off-site governmental agencies.	[CEP – B.1.a] The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):  2. Technical Support Center (TSC) A. Site Emergency Director  Organizational Interface and Coordination  State and Local Event Notification	Non-RIE Command and Control functions, including notifications, remain in the TSC in CEP
177.	Initially, communications between the Emergency Coordinator (in the Control Room) and FPL's Expanded Emergency Organization are by redundant telephone systems, with radio as the backup. When the Emergency Operations Facility is mobilized, communications within the FPL Emergency Response Organization are accomplished primarily using commercial phones. Follow-up messages regarding the prognosis for worsening or terminating of the event as well as requests for on-site support by off-site organizations will be made periodically or as needed by the EC to the RM. Recommendations for off-site protective measures to Division of Emergency Management (DEM) may be included as part of follow-up messages. These measures are indicated on Figure 5-1.	[CEP – E.1]  1. ERO Notification The Emergency Director will direct or perform notification of the ERO for all emergency classification levels. ERO personnel report to their assigned emergency response facilities as directed. In the event of a security threat, personnel may be instructed to respond to alternative facilities, or seek cover if on-site. The means for alerting and notifying ERO members are described in Element F.1.c. 2. ORO Event Notification NextEra, in cooperation with the OROs, has established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes are made to PARs, a notification to the OROs is made within 15 minutes. Receipt location of notification messages is site specific. ORO notification locations are described in the site annexes. [CEP – F.1.c]	Non-RIE  Wording added to align with CEP. No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		Personnel within the Protected Area are notified of the emergency classification via the public address system. The sounding of alarms and announcement of the emergency classification and other pertinent data relating to the emergency classification are made over the public address system.	
		Notification of personnel located onsite, but outside the Protected Area, is accomplished through PA system announcements, administrative controls, and by Security personnel.	
		NextEra sites use an automated ERO notification system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location.	
178.	4.2 State and County Agencies	[CEP E.1.2]	Non-RIE
	The State and County agencies are notified of an emergency situation (within 15 minutes) via redundant communication lines. State of Florida notification and communications procedures are presented in Chapter 6 of the State Plan.	ORO Event Notification  NextEra, in cooperation with the OROs, has established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes are made to PARs, a notification to the OROs is made within 15 minutes.	Wording added to align with CEP. No added, removed or altered commitments or change of intent.
		Receipt location of notification messages is site specific. ORO notification locations are described in the site annexes.	
		[PSL Annex E.1] State and Local Event Notification	
		The site-specific state and county entities (24/7 warning points) notified of a declared emergency at PSL are as follows:	
		State of Florida (State Watch Office)	
		St. Lucie County	
		Martin County     Department of Health Bureau of Radiation Control	

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		(via SWO)	
	1. Division of Emergency Management Initial Notification FPL's Shift Communicator will make initial notification within 15 minutes of declaring an emergency to the Duty Officer at the State Watch Office (SWO) in Tallahassee. The State's Hot Ring Down (commercial telephone and EMnet (Satellite Communications System) serve as backups) will be used for notification of any emergency: Unusual Event, Alert, Site Area Emergency or General Emergency. Backup telephone numbers for 24-hour per day notification are provided by procedure. Figure 4-1 shows the information to be communicated to SWO during initial and follow-up notifications. The listed information is provided to the extent possible at the time of initial notification. Periodically, additional update information is included in follow-up messages. Follow-up messages may come from the Technical Support Center (TSC), if operational, or the Emergency Operations Facility (EOF), if operational.	[CEP E.3]  NextEra sites and OROs have established the content of the initial notification message to be used during an emergency. Minimum content of the initial notification will include the following:  The site's name  Time of event  The ECL  Protective Action Recommendation (PAR)  Whether a release is taking place In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding event conditions and response actions.	Non-RIE Removed procedure level details on who performs notification (See section B.1.a for ERO assigned responsibilities
180.	The initial notification may be brief with certain information not available. Follow-up messages from the Emergency Coordinator or Recovery Manager to the Division of Emergency Management (DEM) will include the required information as it becomes available.	[CEP – E.3]  NextEra sites and OROs have established the content of the initial notification message to be used during an emergency. Minimum content of the initial notification will include the following:  The site's name  Time of event  The ECL  Protective Action Recommendation (PAR)  Whether a release is taking place In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding event conditions and response actions.	Editorial Removed specific ERO titles No added, removed or altered commitments or change of intent.
181.	The Division of Emergency Management has established a procedure to authenticate emergency notification from the St. Lucie Plant. The Hot Ring	[CEP E.1.a] The provisions for notification of response organizations are described above in Element E.1.	Non-RIE Removed information contained in State plan

# Current Emergency Plan **Common Emergency Plan and Site Annex Change Type** Down and EMnet systems are restricted circuits Notifications to OROs include a means of verification under control of the DEM and local government. or authentication within the automated system or by providing call back verification phone numbers. 182. Communications [CEP - B.1.a] **Editorial** The Emergency Coordinator will maintain periodic The on-shift ERO and minimum augmenting ERO is No added, removed or altered contact with the State Watch Office, located at the composed of the following positions, which are commitments or change of intent. State Emergency Operations Center (EOC) in assigned responsibilities within the following functions Tallahassee, via the Hot Ring Down network. (organized by facility): FPL responsibility for communication with off-site Technical Support Center (TSC) agencies is transferred from the Emergency A. Site Emergency Director Coordinator to the Recovery Manager when the Organizational Interface and Coordination Recovery Manager declares the EOF operational. State and Local Event Notification **183.** 4.2 2. Department of Health Non-RIE Initial Notification Removed information contained in The Division of Emergency Management (DEM) State State plan Watch Office Duty Officer is responsible for notifying the Department of Health. Notification is made to the Bureau of Radiation Control. A Health Physicist contacts the St. Lucie County EOC to ascertain what, if any, protective actions have been initiated. If required, the Bureau of Radiation Control activates the Mobile Emergency Radiological Laboratory (MERL) and/or the Radiological Monitoring Teams. Communications Non-RIE 184. The Public Health Physicist maintains contact with the Removed information contained in Division of Emergency Management (DEM) via State plan mobile radio as he/she travels to the FPL Emergency Operations Facility. Contact is maintained with the Mobile Emergency Radiological Laboratory (MERL) by the Division of Emergency Management (DEM) via cellular phone while the MERL is in transit. On arrival, commercial phones are also available. The State Plan describes provisions for communication between EOCs and off-site radiological monitoring teams in Chapter 6 and Appendix III. [CEP -- E.1.a] 185. 4.3 St. Lucie County and Martin County Non-RIE

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Department of Public Safety Directors Initial Notification The risk county EOCs are initially notified simultaneously via the same communications link used (Hot Ring Down or its alternates) to notify the Division of Emergency Management State Watch Office for all four classes of emergencies. Hot Ring Down and its alternates are monitored on a 24-hour basis by the St. Lucie and Martin County Departments of Public Safety. The Department of Public Safety Directors can then be reached by telephone or by dispatching a patrol car. Also, the Duty Officer at the Division of Emergency Management's State Watch Office is responsible for confirming the receipt of emergency notification by the County Emergency Management Directors. When the emergency notification is by commercial telephone, he/she is responsible for verifying the message from the Plant by a callback procedure and informing the County Directors that the message has been verified. Alternate commercial telephone numbers for 24-hour per day notification are provided by procedure.	The provisions for notification of response organizations are described above in Element E.1. Notifications to OROs include a means of verification or authentication within the automated system or by providing call back verification phone numbers.	Removed information contained in State plan
186.	Follow-up messages concerning the emergency (Alert Class and higher) may come from the TSC staff or the EOF. Information that should be contained in these messages is shown in Figure 4-1.	[CEP – E.3] In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding event conditions and response actions. [CEP E.5] ORO procedures provide for initial and follow-up messages to the public including instructions for protective actions, if required. NextEra will assist with establishment appropriate instructions and message content when requested by the ORO.	Editorial  No added, removed or altered commitments or change of intent.
187.	Communications The County Department of Public Safety Directors proceed to the St. Lucie and Martin County Emergency Operations Centers, respectively and use the communication channels available there. These		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed wording not applicable to a NUREG-0654 R2 licensee related

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	include Hot Ring Down, EMnet (Satellite Communications System), teletype, facsimile, police and fire radio networks, telephone, and RACES (Radio Amateur Civil Emergency Services).		element. Removed information contained in County plans
188.	4.4 Federal Agencies 1. U.S. Nuclear Regulatory Commission Initial Notification The NRC Operations Center in Maryland is notified of certain events by Emergency Notification System (ENS) from the Control Room. The notifications include all radiological emergencies and are made in accordance with Federal Regulations and plant procedures. The Emergency Coordinator or his/her designee initiates this contact immediately after notification of the appropriate State or local agencies and not later than one hour after the time the licensee declares one of the Emergency Classes. Alternate commercial phone numbers are provided by procedure.	[CEP E.1.3]  NRC Event Notification  NextEra will notify the NRC using ENS as soon as possible after notification of the OROs, and not later than 60 minutes after event declaration.  An accelerated call to the NRC will be made immediately after notification of local law enforcement agencies (LLEAs), or within about 15 minutes of the recognition of the security-based threat (discovery of an imminent threat or attack against the site), to ensure the NRC is notified of safeguards events. The information provided in the accelerated NRC notification will be limited to the following:  Site name.  ECL if determined prior to the accelerated notification.  Nature of the threat and the attack status. [CEP E.1.b]  The capability to notify offsite response organizations and the NRC within the required time periods is described above in Element E.1.	Non-RIE  The CEP and Annexes are formatted in a 50.47(b) outline.  Removed wording not applicable to a NUREG-0654 R2 element.  Communications systems described in Section F.  Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
189.	Communications Communications with the NRC may be handled by telephone from the Control Room, the Technical Support Center (if operational), or the Emergency Operations Facility (if operational).	[PSL Annex – F.1.a] Each Control Room contains the necessary communications equipment for notifying on-site personnel and off-site authorities in the event of an accident. This includes the Hot Ring Down (HRD) telephone to the State Watch Office (SWO), EMnet (Satellite Communications System), Emergency Notification System (ENS) to the NRC Operations Center (in Maryland), commercial telephones, Florida Power & Light Company radio system, public address system, portable radio sets (walkie-talkies), and a radio paging system. These systems are used as defined by procedure to accomplish the necessary	Editorial  No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		notifications and communications. The Technical Support Center has an emergency communications network similar to the Control Rooms. The TSC also has the NRC Emergency Telecommunications System (ETS). The OSC is maintained in the Outage Control Center on the second floor of the South Service Building. Telephone communications are maintained between the OSC and the Technical Support Center. The Emergency Operations Facility has an emergency communications network including but not limited to, commercial (Bell) telephone lines, Hot Ring Down (HRD) phone, NRC ENS, NRC HPN, NRC counterpart links, EMnet (Satellite Communications System), and various Florida Power & Light Co. maintained radio systems.	
190.	2. U.S. Coast Guard Assistance from the Coast Guard for on-site rescue, aid or evacuation of persons in danger, and the protection of property threatened by any type of disaster can be requested by telephone from the Emergency Coordinator or his/her designee or the Recovery Manager or his/her designee to the Coast Guard Duty Officer.	ANNEX – L.4  At the request of Florida Power & Light Company (on-site activities) and the DEM (off-site activities), the Coast Guard can provide rescue assistance in accordance with their general authority as described in Appendix E.	Non-RIE Shift Manager maintains responsibility for determining offsite support (police, fire, medical) response onto the site.
191.	4.5 Notification of the Public by the State/County The State Plan (See Appendix D for Distribution of State Plan) defines the state and county procedures for notifying the public in the event of an emergency. Appendix III, Section VI of the State Plan describes further provisions.		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed wording not applicable to a NUREG-0654 R2 licensee related element. Removed details provided in State and County plans
192.	4.6 Communications Equipment The various communications systems previously discussed are described in more detail below and shown in Figure 4-2. This communications network incorporates all telephones, the plant public address system, fixed and mobile radio systems, and radio "beepers" employed for routine plant operation and other normal	[CEP F.1.a] Each site maintains communications systems that are designed to facilitate normal and emergency communication. Refer to Chapter 9 of the UFSARs for descriptions of the primary site communications systems.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Section purpose descriptions replaced with planning standard wording.

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# Current Emergency Plan company business. Key personnel on-site are readily accessible, since at any time most or all of these systems are available to contact them. In addition, the available for internal and external communications communication systems of State and County agencies and other organizations with which the company has emergency assistance agreements will be used to implement emergency activities.

Provisions exist for continuous capability of communications with OROs and the NRC. Systems include:

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- Telephone Systems
- Public Address System
- Radio Communications
- Cellular Telephones
- Satellite Telephones
- Local and Wide Area Networks
- Data Systems

Cellular and satellite telephones provide communications capability should the main telephone systems lose power.

Site specific communications system beyond the above are described in the site annexes.

[PSL Annex -- F.1.a]

Each Control Room contains the necessary communications equipment for notifying on-site personnel and off-site authorities in the event of an accident. This includes the Hot Ring Down (HRD) telephone to the State Watch Office (SWO), EMnet (Satellite Communications System), Emergency Notification System (ENS) to the NRC Operations Center (in Maryland), commercial telephones, Florida Power & Light Company radio system, public address system, portable radio sets (walkie-talkies), and a radio paging system. These systems are used as defined by procedure to accomplish the necessary notifications and communications.

The Technical Support Center has an emergency communications network similar to the Control Rooms. The TSC also has the NRC Emergency Telecommunications System (ETS).

The OSC is maintained in the Outage Control Center on the second floor of the South Service Page 99 of 165

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		Building. Telephone communications are maintained between the OSC and the Technical Support Center.  The Emergency Operations Facility has an emergency communications network including but not limited to, commercial (Bell) telephone lines, Hot Ring Down (HRD) phone, NRC ENS, NRC HPN, NRC counterpart links, EMnet (Satellite Communications System), and various Florida Power & Light Co. maintained radio systems.	
193.	Public Address System (PA)	[CEP - F.1.a]	Editorial
	The PA system, with speakers strategically located throughout the Protected Area, provides for the transmission of warning and instructions in the event of an emergency. The system is in frequent use during normal plant operations, and consists of numerous separate amplifiers which operate from the plant 120 volt AC vital instrument power system. Handsets are provided in the Plant Control Rooms, the North and South Services Buildings, and numerous other locations within the Protected Area. The system includes one paging channel and five party line channels.	Provisions exist for continuous capability of communications with OROs and the NRC. Systems available for internal and external communications include:  • Public Address System [CEP F.1.c] Personnel within the Protected Area are notified of the emergency classification via the public address system. The sounding of alarms and announcement of the emergency classification and other pertinent data relating to the emergency classification are made over the public address system.  Notification of personnel located onsite, but outside the Protected Area, is accomplished through PA system announcements, administrative controls, and by Security personnel.  NextEra sites use an automated ERO notification system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location.	No added, removed or altered commitments or change of intent.
194.	Commercial Telephones	[CEP – F.1.a]	Editorial
	There are numerous Telephone System lines connected to the plant for normal dial telephone service. This system represents the primary system	Provisions exist for continuous capability of communications with OROs and the NRC. Systems available for internal and external communications	No added, removed or altered commitments or change of intent.

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	for routine communication with areas outside the	include:	
	plant.	Telephone Systems	
195.	Portable Radio Transceivers	[CEP – F.1.a]	Non-RIE
	Various portable radio transceivers (walkie-talkies) are available to supplement the fixed communications equipment in the plant. These radios are lightweight battery operated units which may be easily carried by personnel to any location on the plant site. Some of these portable radios are capable of communicating with an FM radio transceiver over a range of several miles.  Telephones may be interconnected to the Radio	Provisions exist for continuous capability of communications with OROs and the NRC. Systems available for internal and external communications include:  Radio Communications	Removed details on radio system. ERO notifications may be done using beepers or cellular phones. Implementing procedures will provide details on exact systems used to communicate.
	Paging System. This system is capable of reaching beepers located within FPL's service area from Sebastian Inlet to Miami-Dade County/Monroe County line. Beepers are regularly assigned to key personnel in the Emergency Response Organization as shown in the Emergency Response Directory (ERD).		
196.	Company Radio System	[PSL Annex F.1.a]	Editorial
	The company radio system consists of a variety of fixed base radio equipment. The System Operations Power Coordinator's office, trouble dispatcher offices, service centers, power plants, and mobile service vehicles are equipped with one or more of these radio systems. In the event of interruption of electric service to the base radio stations, emergency power can be supplied to this equipment.  The Control Room, TSC, and EOF have access to one or more of these radio systems. These radio systems will provide back-up communications between the Plant, the EOF, and the System Operations Office. The System Operations Office has direct telephone lines and either direct, patch, or indirect radio contact with all the plants, radio-equipped vehicles and service centers in the Florida Power and Light Company system.  Hot Ring Down Telephone System (HRD)  The Hot Ring Down Telephone System is installed in	Each Control Room contains the necessary communications equipment for notifying on-site personnel and off-site authorities in the event of an accident. This includes the Hot Ring Down (HRD) telephone to the State Watch Office (SWO), EMnet (Satellite Communications System), Emergency Notification System (ENS) to the NRC Operations Center (in Maryland), commercial telephones, Florida Power & Light Company radio system, public address system, portable radio sets (walkie-talkies), and a radio paging system. These systems are used as defined by procedure to accomplish the necessary notifications and communications. The Technical Support Center has an emergency communications network similar to the Control Rooms. The TSC also has the NRC Emergency Telecommunications System (ETS).	No added, removed or altered commitments or change of intent.

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the Control Rooms, TSC, EOF, State EOC, and risk county EOCs. This system uses dedicated commercial telephone lines and is activated through pre-designated three digit access "telephone numbers."

The initial notification of an emergency and other required notifications are made via this system to the State Division of Emergency Management (State Watch Office - Tallahassee) and the County Departments of Public Safety. The Hot Ring Down System is the primary system for communication among these facilities. Commercial telephone and EMnet (Emergency Satellite Communications System) serve as backups.

**EMnet** 

EMnet is an Emergency Satellite Communications System which is available in the Control Rooms, the Technical Support Center, and the Emergency Operations Facility. The EMnet is an alternate communications pathway for the Hot Ring Down telephone.

NRC Emergency Telecommunications System (ETS) Portions of this system are used to contact the NRC, such as the ENS and HPN. These phone links are described below:

- Emergency Notification System (ENS) The ENS is used for initial notification by the licensee, as well as ongoing information on plant systems, status, and parameters. The ENS is installed in each Control Room, TSC and EOF.
- Health Physics Network (HPN) The HPN is used for communication with the licensee on radiological conditions (in-plant and off-site) and meteorological conditions, as well as their assessment of trends and needs for protective measures on-site and off-site. The HPN is located in the TSC and EOF.

Additionally, this system contains conferencing bridges and access to a Local Area Network (LAN) for

The OSC is maintained in the Outage Control Center on the second floor of the South Service Building. Telephone communications are maintained between the OSC and the Technical Support Center.

The Emergency Operations Facility has an emergency communications network including but not limited to, commercial (Bell) telephone lines, Hot Ring Down (HRD) phone, NRC ENS, NRC HPN, NRC counterpart links, EMnet (Satellite Communications System), and various Florida Power & Light Co. maintained radio systems.

[CEP -- F.1.b]

The methods for notification of response organizations are described in Elements E.1 and F.1.a.

[CEP - H.10]

ERDS provides the NRC with selected meteorological data points on a near real-time basis.

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	use by the NRC Site Team.			
197.	4.7 Testing	[CEP - N.4.f]		Editorial
	As discussed in Section 7.1, Exercises and Drills, communications equipment and procedures will be tested periodically as part of the FPL program of exercises, drills, and tests for maintaining emergency preparedness.	once per calendar year.  Communications tests described in Element F.3 can be performed as drills provided they include the aspect of understanding the content of messages.  [CEP – F.3]  Communication systems testing is accomplished in		No added, removed or altered commitments or change of intent.
			- ı. nication System Testing µirements	
		Communication System	Testing Requirement	
		ORO Notification System	Monthly (a)	
		NRC FTS (ENS) Network	Monthly (b)	
		ERDS	Verify Transmission Quarterly	
		ERO Notification System	Per Elements N.4.h and N.4.i	
		Field Monitoring Teams Communication	Annually <sup>(a)</sup>	
		Telephone System	Frequent Use (c)	
		Station Radio System	Frequent Use (c)	
		Station PA System ANS	Frequent Use (c) per site specific ANS Design	
		(a) Test credit may be given by successful use in a drill.		
		TSC and EOF requir	ntrol Room is Frequent Use. re monthly testing.	
		testing frequency of "Fre associated equipment is	systems that are listed with a quent Use" indicate that the normally used at a sufficient separate additional testing is	
198.	FIGURE 4-1,	[CEP - E.3]		Non-RIE
	FLORIDA NUCLEAR PLANT EMERGENCY NOTIFICATION FORM	NextEra sites and OROs content of the initial notif	ication message to be used inimum content of the initial	Removed actual form from CEP

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		<ul> <li>The ECL</li> <li>Protective Action Recommendation (PAR)</li> <li>Whether a release is taking place</li> <li>In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding event conditions and response actions.</li> </ul>	
199.	FIGURE 4-2, COMMUNICATIONS INTERFACES	[CEP – B.4] Figure B.4 identifies the interfaces between NextEra ERFs, NRC, OROs, and local support organizations.	Editorial  No added, removed or altered commitments or change of intent.
200.	TABLE 4-1, COMMUNICATIONS RESPONSIBILITIES		Editorial Removed table. ERO Responsibilities are provided in section B.1.a of CEP. No added, removed or altered commitments or change of intent.
	Section 5.0, Response to Accident Conditions		
201.	Table 3-1 identifies a spectrum of off-normal events and classifies those events into four categories. The classification is based on Emergency Action Levels which are related to instrument readings, or observations, or a combination of these identified in the table. This section discusses the assessment of and response to these events.	[CEP—D.1]  NextEra has established and maintains a standard emergency classification and emergency action level scheme. The EAL Technical Basis Document is referenced in the site annexes. The spectrum of postulated emergency events is categorized into the following four (4) emergency classification levels (ECLs):  Unusual Event  Alert  Site Area Emergency  General Emergency  [PSL Annex – D.1]  The PSL EAL scheme is documented in EP-PSL-121, PSL Emergency Action Level Technical Basis Manual.	Editorial  No added, removed or altered commitments or change of intent.
202.	5.1 Accident Assessment Once an off-normal event has been detected and	[CEP – I.1.a]	Non-RIE  Remove detailed descriptions of
	classified in accordance with the Emergency Action Levels, a process of continuing assessment will be	The magnitude of a release of radioactive material to the environment is primarily identified directly by effluent monitors. Survey and sample analysis may	Remove detailed descriptions of systems provided in the UFSAR.  No added, removed or altered

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procedures.

initiated. System instrumentation and procedures which would be used as appropriate in the assessment process are described below. Specifications of instrumentation utilized for accident assessment are contained in procedures. Post accident sampling capabilities are also described in

Additional release pathways are also monitored. These include the fuel building vent (exhaust for fuel pool, new fuel room and fuel pool pump room). During accident conditions, the Unit 2 fuel building exhaust is diverted and monitored through the Unit 2 plant vent. The two Emergency Core Cooling System (ECCS) pump bays at each of the units have monitored exhaust systems. The two main steam lines at each of the units are monitored for possible releases via the safety relief valves and/or atmospheric steam dump.

All monitored pathways, excluding the main steam lines, are equipped with high efficiency particulate filters or charcoal/iodine filters or both. The monitoring point is after the filters and before the release opening to the atmosphere.

For particulates and iodine, release points other than the main steam lines will be monitored using grab sampling and analysis in accordance with plant procedures.

In addition to these monitors, each unit is provided with an area radiation monitoring system (see Table 3-3). This monitoring system employs detectors distributed throughout the unit and detector indicators are provided locally and in the respective Control Rooms. The area monitoring system provides early indication of a release of radioactivity within the unit.

Under accident conditions, the containment atmosphere is monitored for radioisotopic content by grab sampling. In addition, the containment is provided with radiation monitors. These monitors would provide an early indication of radioactivity in the containment, particularly as a result of a loss of

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also be used to determine the magnitude of a release. Indirect means such as core damage estimates and release pathway assumptions may be used to estimate the magnitude of a release of radioactive material.

The isotopic composition of a release of radioactive material to the environment may be determined by; (1) effluent gaseous monitors, (2) survey and sample analysis, or (3) source term estimates based on core damage and release pathway assumptions.

Dose assessment model methods are capable of estimating source term and magnitude of gaseous releases from effluent monitors or plant parameter data and release rate projections.

[CEP - H.7]

**Process and Area Radiation Monitors** Process Radiation Monitors (PRMs) measure radioactive noble gas, iodine, and particulate concentrations in gaseous effluent pathways and gross radioactivity in other gaseous and fluid streams, and are used for event recognition and declaration. Area Radiation Monitors (ARMs) measure in-plant

dose rates and allow in-plant dose rate determinations to be made remotely. This information may be used to aid in the determination of plant area accessibility for the protective action function.

Refer to Chapters 11 and 12 of the UFSARs for descriptions of the PRM and ARM systems.

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	reactor coolant to the containment building. Chemical and radioisotopic analyses of the reactor coolant are provided by grab sampling.		
203.	Also, each plant has a system of fire detectors with appropriate alarms in the Control Room to provide warning of a fire emergency.		Non-RIE Removed wording of fire detectors addressed in Fire Protection Program
204.	2. On-site Sampling Resources The capability is available at the St. Lucie Plant to obtain grab samples of the reactor containment atmosphere and the reactor coolant. To obtain grab samples of the containment atmosphere following an accident, a special removable gas sampling vessel is provided in the Containment Hydrogen Analyzer System on both units. The removable vessel would be transported to the plant laboratory. At the laboratory, a portion of the gas would be drawn from the vessel, and the radioisotopic content determined by a multichannel analyzer. Plant procedures provide detailed instructions for sample acquisition, transportation, and analysis.	[CEP I.4] Source term present in reactor coolant, containment atmosphere, and spent fuel pool area atmosphere are estimated using effluent, process and area radiation monitor readings, comparison of plant conditions against design basis event scenarios, sample analysis and environmental survey results, and plant parameter indications as inputs into the dose assessment and core damage assessment processes.  [CEP – H.13] Sampling and analysis equipment are available (see Element C.4) for quantitative activity determination of liquid and air samples, and qualitative activity determination of terrestrial samples.	Editorial  No added, removed or altered commitments or change of intent.
205.	Reactor coolant grab samples can also be taken following an accident. Details on sample acquisition, transportation, and analysis are described in plant procedures.  Air samples will be collected using portable air samplers in accordance with a plant procedure. Portable air samplers are located such that time required to obtain results is minimized for critically manned areas  (e.g., Control Room, Technical Support Center). Silver zeolite sample cartridges are stored on-site. To preclude interferences by noble gas adsorption, only silver zeolite cartridges will initially be used to sample critically manned areas (e.g., Control Room, Technical Support Center, other areas which require personnel to be present). Collected samples will be transported promptly to the lab. If necessary, an	[CEP I.4.a] Each NextEra site has arrangements to obtain and analyze highly radioactive samples from the reactor coolant system, containment atmosphere and sump, and spent fuel pool. Site specific arrangements to obtain and analyze highly radioactive samples are described in the site annexes. CEP – H.13] Sampling and analysis equipment are available (see Element C.4) for quantitative activity determination of liquid and air samples, and qualitative activity determination of terrestrial samples. [PSL Annex I.4.a] Changes have been made to reflect the NRC approved License Amendment Request received	Editorial  No added, removed or altered commitments or change of intent.

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	alternate Counting Room will be established using portable equipment in a low background area.  Analysis by gamma spectroscopy, in accordance with approved procedures, is preferred, but portable instrumentation yielding usable results is available.	from the NRC. The NRC issued Plant License Amendment L-2000-131, Relief from Technical Specification and NUREG - 0737 Requirements for Post-Accident Sampling System. Approved amendments: Unit 1 #174, Unit 2 #114 and thereby eliminated the requirements to have and maintain the Post-Accident Sampling System at PSL. A chemistry procedure describes post-accident contingency plans for obtaining high activity samples. Procedures are in place to assess core damage under accident conditions.  [CEP – H.13]  Sampling and analysis equipment are available (see Element C.4) for quantitative activity determination of liquid and air samples, and qualitative activity determination of terrestrial samples.	
206.	Meteorological Systems Meteorological data are required to make estimates of off-site radiation exposure in the event of a release of gaseous radioactivity. Measurement of three meteorological parameters, wind speed, wind direction, and a measure of atmospheric stability, are required to make estimates of atmospheric dispersion, an essential part of an off-site radiation exposure calculation.  Meteorological data are collected at the St. Lucie Plant site. The readouts from the site meteorological tower are digital with strip chart recorders to provide 15 minute averages and the data are directly available at the Unit 1 Control Room. The National Weather Service Station serves as the backup. Table 5-1 summarizes the available data.  As indicated in Table 5-1, values of the key meteorological parameters are provided for by the St. Lucie Plant meteorological tower. These readouts are provided continuously and the data are directly available at the Control Room, Technical Support Center (TSC), and the Emergency Operations Facility (EOF) via the Emergency Response Data Acquisition	[CEP – H.7]  NextEra sites have installed instrumentation for seismic monitoring, radiation monitoring, hydrologic monitoring, meteorological monitoring, and fire/ toxic gas/combustion products detectors in accordance with site Current Licensing Basis (CLB) documents.  1. Meteorological Monitoring  Each NextEra site has a permanent on site meteorological monitoring station for the acquisition and recording of wind speed, wind direction, and stability class for use in offsite dose projection.  Meteorological information is displayed in the Control Room, TSC, and EOF. Refer to Chapter 2 of the UFSARs for descriptions of the meteorological monitoring systems.  [CEP – H.8]  1. Meteorological Monitoring  Weather forecasts and certain meteorological data is available from the National Weather Service.  [CEP – H.8]  Site meteorological information is available on workstations in the Control Room(s), TSC, EOF, and to remote dose assessors.	Editorial  No added, removed or altered commitments or change of intent.

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	and Display System (ERDADS).  Meteorological data are provided to the State via initial and follow-up communications. Data is also provided in response to direct inquiries from DEM and the Bureau of Radiation Control. The EOF and NRC can receive timely meteorological information through the TSC, upon request, or through ERDADS.		
207.	4. Source Term and Release Determination As discussed in Section 5.1.3 certain meteorological parameters are required for the calculation of off-site radiation exposure from airborne releases. Additional essential pieces of information are the rate of release and isotopic composition of the released radioactivity. If radioactivity was released from a monitored vent, then a direct measure of the release rate would be available. Monitored release points are discussed in Section 5.1.1.	[CEP I.1.a] The magnitude of a release of radioactive material to the environment is primarily identified directly by effluent monitors. Survey and sample analysis may also be used to determine the magnitude of a release. Indirect means such as core damage estimates and release pathway assumptions may be used to estimate the magnitude of a release of radioactive material.  The isotopic composition of a release of radioactive material to the environment may be determined by; (1) effluent gaseous monitors, (2) survey and sample analysis, or (3) source term estimates based on core damage and release pathway assumptions.  Dose assessment model methods are capable of estimating source term and magnitude of gaseous releases from effluent monitors or plant parameter data and release rate projections.	Editorial  No added, removed or altered commitments or change of intent.
208.	Based upon certain assumptions, a specific source term can be determined using EPIP-14, Dose Assessment Using the Unified RASCAL Interface for all monitored release points and grab samples.	[CEP I.1.b]  NextEra uses site specific versions of the Unified RASCAL Interface (URI) off-site dose projection computer model. The underlying dose assessment model in URI is the NRC RASCAL 4 model, based on the methods and equations documented in NUREG-1940.  The URI model provides off-site radiological dose and dose rate estimates based on near real time or hypothetical inputs. Projected dose is based on EPA-400-R92-001 dose conversion factors and provided as; (1) the total effective dose equivalent, or TEDE (the sum of the effective dose equivalent from immersion, 4 days of ground deposition, and the	Editorial  No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		committed effective dose equivalent from inhalation), and (2) the committed dose equivalent to the thyroid (CDE thyroid).  URI dose projection results are given for various locations from the site boundary to 10 miles. URI is capable of providing dose assessment results for multiple release points from the site.  URI dose projection results and field monitoring readings are used in assessing radiological EALs and PARs.	
209.	In the event of a loss of coolant accident, the containment radiation monitors would provide the first indication of the magnitude or existence of radioactivity in the containment atmosphere.  Additional information about the isotopic composition of the airborne radioactivity would be derived from isotopic analysis of a containment atmosphere sample.  Containment High Range Radiation Monitors (CHRRM) provide an indication of levels of radioactive material in the containment atmosphere. These monitors can be used to determine a certain concentration of radionuclides based upon the isotopic mixes assumed for the accidents described in the Updated Final Safety Analysis Report (UFSAR). Procedures addressing these parameters and calculations are provided in EPIP-14, Dose Assessment Using the Unified RASCAL Interface.  Procedures have been developed to assist the plant staff in estimating release rates and isotopic content for releases from the various plant vents.  A containment release rate for use in the off-site dose estimation procedure mentioned above is conservatively estimated as the design basis leak rate at the design pressure.	[CEP I.3] The ERO monitors plant parameters using information provided by plant data transmittal systems to assess the status of reactor fuel using core damage assessment procedures. The ERO monitors plant data systems to evaluate the status of containment integrity, systems used to mitigate the release of radioactive material to the environment and to identify leakage of radioactive material from plant systems, structures, and components. Effluent and process monitors are used to determine the onset and duration of an actual or potential release of radioactive material to the environment.	Editorial No added, removed or altered commitments or change of intent.
210.	5. Exposure and Dose Rate Determination	[CEP I.6]	Non-RIE
	One of the uses of radiation monitors and meteorological instrumentation is the calculation of off-site radiation exposures.	NextEra sites use an industry recognized dose assessment model to make timely assessments of the actual or potential magnitude and locations of any	Removed procedure level details on who and how dose projections are done.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
#	An estimate of doses is needed in the event of a radiological emergency so that responsible agencies can use this information to plan protective action. EPIP-14, Dose Assessment Using the Unified RASCAL Interface, provides the details of how initial dose estimates are determined. In particular, current meteorological data, grab sample results, Field Monitoring Team data, process monitor data, and Containment High Range Radiation Monitors (CHRRM) readings are used in conjunction with tables to estimate doses under actual meteorological conditions. Dose calculations will be updated periodically during the course of the accident and the results will be provided to State and County authorities for their use in evaluating the need for protective action. Figure 5-1 compares off-site dose estimates with the Environmental Protection Agency (EPA) Protective Action Guides (PAGs). Initial dose estimates would be prepared by the Chemistry Department representative who reports to the Technical Support Center. Refined dose estimates would be performed by dose assessment personnel in the Emergency Operations Facility, when operational. Dose estimates are performed using EPIP-14. Default values, estimating a worst case situation can be utilized if assessment instrumentation is not available (off-scale or inoperable) and field sample analysis has not yet been completed. FPL off-site dose calculations and field monitoring analysis will be compared with Florida Department of Health and other off-site agencies (NRC, DOE) calculations and analysis when those	radiological hazards through gaseous release pathways. Personnel qualified in dose assessment are available on shift, remotely, and in the EOF. Dose assessment results and field monitoring readings assist in evaluating appropriate ECLs based on radiological EALs, and for developing any related PARs.  The actual or potential magnitude of liquid radiological releases with regard to the ECLs are determined by liquid effluent monitors, direct area surveys, or sample analyses.  With regard to the ingestion pathway, field monitoring teams are used to obtain liquid effluent samples from radioactive liquid releases. Sample results are used in conjunction with Offsite Dose Calculation Manual (ODCM) methods to estimate potential ingestion exposure in support of EAL determination. Also, liquid release monitoring activities are coordinated and sample results shared with ORO agency personnel to assist their determination in intermediate phase protective actions.	Change Type
	agencies co-locate in the EOF.		
211.	6. Off-Site Monitoring Dosimetry The Florida Department of Health maintains a system of about 35 TLD stations in the vicinity of St. Lucie Plant. Stations are provided in each land based 22.5□ sector, at approximately 1-mile, 5-mile and 10-mile radii.		Non-RIE Removed information from State Plan

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212.	Laboratories and Sampling Laboratory facilities are provided as discussed in Section 2.3.2. The plant's on-site radiological laboratories serve as primary facilities with backup provided by portable equipment. Analysis of off-site environmental samples collected by the State will be performed at the State's Mobile Emergency Radiological Laboratory. This mobile lab can be in position near the site within three hours of notification. Bureau of Radiation Control representatives dispatched to the EOF will serve as a central point for the receipt of all State off-site field monitoring data.	[CEP H.13] The site radiological laboratory is the primary location for receipt of field monitoring team samples. The EOF RP Coordinator is responsible for direction and coordination of field monitoring sample analyses, and for assessing the radiological data obtained from the Field Monitoring Teams.  Sampling and analysis equipment are available (see Element C.4) for quantitative activity determination of liquid and air samples, and qualitative activity determination of terrestrial samples.  [PSL Annex – C.4] Florida Power & Light Company has primary and backup radiological laboratory facilities on-site. A hot lab backup will be provided by portable equipment described in procedures. Environmental sampling will be augmented by the State's Radiological monitoring team and the Mobile Emergency Radiological Laboratory (MERL) within approximately three hours of activation. A Florida DOF-BRC representative dispatched to the EOF will coordinate all State off-site field monitoring data and sample media. If required, the laboratory facilities at FPL's Turkey Point Plant can be used; appropriate arrangements will be made on an as-needed basis.	Non-RIE  Revised wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format.  No added, removed or altered commitments or change of intent.
213.	Field Monitoring - State Chapter 9 of the State Plan discusses the State role in accident assessment. It describes agencies and their missions, specialized personnel, special equipment, and other matters related to field monitoring within the Plume Exposure Pathway Emergency Planning Zone (EPZ). Chapter 8, Section V and Figures 8-2 to 8-4 discuss in further detail the capability and resources for field monitoring.  Transportation of field teams is discussed in Chapter 8, Section III of the State Plan. Field team communications are described in Chapter 6 of the State Plan. Monitoring equipment is described in Chapter 8, Section V and Figures 8-2 to 8-4.		Non-RIE Removed information from State and County Plans

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Composition of field teams is discussed in Chapter 9 of the State Plan.  Although county plans discuss accident assessment, Section X of Appendix III, of the State Plan, indicates that the off-site accident assessment responsibility rests with the Bureau of Radiation Control.  DOH Bureau of Radiation Control provides for the measurement of iodine in air and the use of such measurements in assessment activities.		
214.	Field Monitoring - Plant Plant procedure RP-SL-100-1005, "Radiation Protection Emergency Organization," provides methods for activation of emergency field monitoring teams and dispatching these teams throughout the plume EPZ. Procedure RP-SL-102-2005, "Environmental Monitoring During Emergencies," includes techniques for measurements of airborne concentrations of radioiodine and direct radiation dose rates, transportation of teams, expected deployment times, and communications. Instrumentation, at the plant, is available with the capability to detect radioiodine in concentrations of at least 10-7 microcuries/cc, in the field. Assessment of data is discussed in EPIP- 10, "Off-site Radiological Monitoring."	[CEP H.9] Each NextEra site maintains a supply of equipment, either at the site or the near-site EOF, for two Field Monitoring Teams assigned to perform onsite and offsite radiological monitoring and sampling functions. Federal, industry and private entities can be contacted to coordinate additional materiel and personnel resources for offsite radiological monitoring. [CEP I.7] NextEra field monitoring equipment has the capability to detect and measure airborne radioiodine concentrations as low as 1E-7 µCi/cc in the presence of noble gases. Air samples will be taken with portable air sampling equipped with a Silver Zeolite or equivalent cartridge and particulate filter. Interference from the presence of noble gas and background radiation is minimized by ensuring that monitoring teams move to areas of low background prior to analyzing the sample cartridge.  Air sample results can be estimated in the field through the use of portable monitors. The samples can be subsequently analyzed for greater precision by the laboratory facilities described in Element C.4. [CEP I.8] NextEra field monitoring teams will track the plume from any radiological release by monitoring radiation levels and by obtaining and analyzing air samples. Field monitoring team environmental survey and air sample results are compared with dose assessment	Editorial No added, removed or altered commitments or change of intent.

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		results to validate or adjust projections. Additionally, field monitoring results can be input into the dose assessment model to develop projections at different locations.	
215.	Coordination of Sampling Data  To assure that information concerning FPL off-site	[CEP I.5]  NextEra is responsible for NextEra field monitoring	Non-RIE Removed details on State Actions
	radiological assessment is exchanged, arrangements have been made for representatives from the Bureau of Radiation Control to be stationed at the EOF. Direction and control of field operations for the Department of Health will be provided by the Bureau of Radiation Control Health Physics Supervisor. He/she will conduct/supervise accident assessment and/or response of the field teams from a post at the EOF, where office space and communications equipment are available. Prior to the arrival of Bureau of Radiation Control personnel, coordination of this information will be through follow-up communications with DEM and the Plume Exposure Pathway EPZ counties.  Department of Energy (DOE) off-site monitoring assistance, if required, will be requested by the DEM in consultation with the Bureau of Radiation Control. Lead responsibility for coordination with the DOE is assigned to the Bureau of Radiation Control.	team activities.  NextEra field monitoring team activities are coordinated with environmental monitoring efforts performed by ORO field monitoring teams.  [CEP I.9]  NextEra maintains equipment for the utility field monitoring teams. Methods to monitor a radioactive plume include establishing peak centerline values and immersion areas. Monitoring strategies may include the traversing of plumes when road networks and exposure rate permit. Additionally, local field sampling and monitoring points are specified to support pre-positioning of teams or use in comparison with dose projection results.  Data from the NextEra field monitoring teams is compared to data provided by state field monitoring teams that may be dispatched into the area. Data collected before state field monitoring teams are in the field is made available to state dose assessment personnel.  [CEP I.10]  NextEra EOF dose assessment personnel coordinate field monitoring team radiological monitoring activities and compare dose projection results with ORO and NRC representatives.	Removed details off State Actions
216.	<ul> <li>5.2 Protective Response</li> <li>This section describes the protective actions on-site and data provided to assist the State and County in determining appropriate off-site protective actions.</li> <li>1. Protective Actions</li> <li>On-site</li> </ul>	[CEP J.1]  NextEra maintains procedures to provide for a range of protective actions for all areas controlled by the site. Protective actions have been developed for radiological incidents and to protect personnel during hostile actions directed at the site.	Editorial  No added, removed or altered commitments or change of intent.
	On-site protective actions for a radiological	Sitewide notifications and announcements are routinely made using the Public Address (PA) system.	

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	emergency consist of evacuation of the affected area (localized evacuation or site evacuation), monitoring of all personnel who were in the affected area, decontamination as required, and re-entry to determine the magnitude and extent of the problem when it is determined to be safe to do so.	Personnel on site are notified of a declared emergency through the PA system.  Visitors within the Protected Area are escorted by badged individuals. The escort is responsible for controlling and directing their assigned visitors regarding actions required by any announcements and alarms.  Security personnel are used, as available, to augment PA announcements and to check OCA areas for remaining individuals.	
217.	During a Hostile Action event, protective actions can range from taking cover to evacuation, depending on the event and timing of the event.		Non-RIE Removed actions controlled by Security Procedures.
218.	Individuals remaining or arriving on-site during an emergency will be provided protective equipment as prescribed by the TSC RP Supervisor and plant procedures. Florida Power & Light Company will make Potassium lodide (KI) available for use as a thyroid blocking agent. Use of KI will be in accordance with plant procedures.	Protective equipment and supplies are available to personnel remaining on site or arriving on site during the emergency to minimize the effects of radiological exposures or contamination in accordance with radiation protection procedures. Protective measures include the following:  1. Individual Respiratory Protection Respiratory protection equipment is used by qualified personnel when called for by exposure control procedures. The radiological use respiratory protection program is maintained by RP. Self-contained breathing apparatus is used in areas that are deficient in oxygen or when fighting fires. Self-contained breathing apparatus are available with other firefighting equipment for use by the site fire brigade.  2. Individual Thyroid Protection Efforts are made to utilize respiratory protective equipment to minimize ingestion and/or inhalation of radionuclides and to maintain internal exposure below the limits specified in 10 CFR 20, Appendix B. However, if an emergency involves the accidental or potential ingestion or inhalation of radioactive iodine, Potassium Iodide tablets (KI)	Non-RIE Added wording to descriptions to align with CEP.

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		are maintained and available for distribution. The administration of potassium iodide (KI) to NextEra and vendor personnel may be used to mitigate the consequences of inhalation of radioiodine during an emergency. The process for administration of radioprotective drugs is described in implementing procedures.  3. Protective Clothing Protective clothing will be issued when needed to limit personal contamination and minimize the spread of contamination.	
219.	Control Room personnel are in an isolated environment and need protective equipment if they leave the Control Room. An emergency kit with necessary equipment is present inside both Control Rooms and is to be used for this purpose (Table 2.3). In addition, if there is fire or smoke in the Control Room or if the Control Room air becomes contaminated, Control Room personnel might have to don respiratory protective equipment in order to remain in the Control Room to handle the emergency.		Non-RIE Removed discussion of Control Room habitability. Addressed in UFSAR and operations procedures.
220.	Decontamination Personnel decontamination facilities are available in four locations. Their use will be governed by the nature of the incident.  1. Hot Locker Rooms - Showers and sinks available for the decontamination of personnel with no (or minor) injuries. One is located in the Auxiliary Building for each unit.  2. Lawnwood Regional Medical Center in Ft. Pierce, FL and Martin Memorial Medical Center in Stuart, FL are available for medical treatment and decontamination of contaminated injured individuals. Lawnwood Regional Medical Center is located approximately 8 miles Northwest of St. Lucie Plant. Martin Memorial Medical Center is located approximately 10 1/4 miles South of St. Lucie Plant.  3. Decontamination Facility - The Site Assembly Station personnel decontamination capabilities	[CEP J.3] Personnel evacuating are monitored for contamination, and, if possible and necessary, decontaminated before leaving the site. If conditions do not allow for decontamination of personnel on-site, they will be directed to designated offsite reception center(s) for radiological monitoring and decontamination, if required.  [PSL Annex K.1.e.] Personnel decontamination facilities are available in three locations. Their use will be governed by the nature of the incident.  1. Hot Locker Rooms - Showers and sinks available for the decontamination of personnel with no (or minor) injuries. One is located in the Auxiliary Building for each unit.  2. Lawnwood Regional Medical Center in Ft.	Editorial  No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	consist of utilizing various types of decontamination agents, such as waterless cleaners and decontamination foams. A quantity of cloth material is available for use with these decontamination agents. Contamination monitoring is performed through the use of count rate instruments with beta sensitive probes. Extra clothing for personnel whose personal clothing has been contaminated is available in the form of disposable garments. Decontamination of vehicles will be handled following the accident. Methods for decontamination and monitoring are described in plant procedures.	Pierce, FL and Cleveland Clinic Martin Health in Stuart, FL are available for medical treatment and decontamination of contaminated injured individuals.  • Lawnwood Regional Medical Center is located approximately 8 miles Northwest of St. Lucie Plant.  • Cleveland Clinic Martin Health is located approximately 10 1/4 miles South of St. Lucie Plant.	
221.	Off-site Off-site areas are the responsibility of the respective County Public Safety Departments, the Department of Health, and the Division of Emergency Management of the State of Florida. Control of radioactive contamination and public safety in off-site areas are responsibilities of these governmental agencies, and their criteria for implementing protective actions may be found in the State Plan Chapter 10. Decontamination of off-site areas will be performed under the direction of the Bureau of Radiation Control. Section XII.E. of Appendix III of the State Plan discusses evacuation routes, times, and facilities in relation to St. Lucie and Martin Counties.		Editorial Removed details contained in State Plan No added, removed or altered commitments or change of intent.
222.	Recommendations for protective actions will be made by the Emergency Coordinator (Recovery Manager after EOF is operational) based upon consideration of severity of an accident (emergency class) and estimated off-site doses (if available). A range of protective actions has been developed in accordance with NUREG-0654, FEMA REP 1, NUREG-0654, FEMA-REP-1, Rev. 1, Supplement 3 and EPA 400-R-92-001. Figure 5-1 shows the decision-making criteria for determination of Protective Action Recommendations (PARs).	<ul> <li>[CEP J.6]</li> <li>NextEra sites have developed PARs, in accordance with agreements made with the state agencies, for the plume exposure pathway EPZ that include evacuation, sheltering, and recommendations for radioprotective Potassium lodide use based on the following:         <ul> <li>NUREG-0654/FEMA-REP-1, Supplement 3, Guidance for Protective Action Strategies, November 2011</li> <li>EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear</li> </ul> </li> </ul>	Editorial  No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		<ul> <li>Incidents, May 1992</li> <li>Guidance for Industry, KI in Radiation Emergencies, Questions and Answers, FDA, December 2002</li> <li>Potassium Iodide as a Thyroidal Blocking Agent in Radiation Emergencies, FDA Guidance, November 2011</li> </ul>	
		PARs for the general public will be based on plant conditions and/or offsite dose assessment results.  PARs beyond the 10-mile EPZ will be developed on an "ad hoc basis" from projected or measured dose in	
		excess of EPA PAGs. Because dose projection accuracy is limited by distance, actual field measurements are used to corroborate projections before issuing PARs in areas outside the 10-mile EPZ.	
		The PAR strategy basis document is referenced in the site annexes.  [PSL Annex J.6]	
		The PSL site specific basis adaptation of NUREG- 0654 Supplement 3 PARs is documented in in EP- PSL-124, PSL Protective Action Recommendation Technical Basis Manual.	
223.	5.2 2. On-site Warning and Response During an emergency, the relocation of plant personnel in the Protected Area may be required in order to prevent or minimize exposure to radioactive materials. Evacuation is the primary protective action anticipated for on-site personnel. An emergency evacuation is the orderly, rapid, and safe withdrawal of all personnel from an area affected by an emergency condition. The plant public address system will be used to announce evacuation orders. Announcement of an emergency situation to all plant personnel within the Protected Area can be accomplished in less than 15 minutes. Depending on the nature of the emergency and the extent of the area affected, evacuations have been classified as		Non-RIE Removed discussion items and procedure level details.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Area Evacuation.		
224.	Area Evacuation.  1. Local Evacuation Definition A local evacuation is the evacuation of personnel from a room, area, or building located within the Protected Area. Criteria The evacuation of an affected local area will be initiated per routine RP procedures when any of the following conditions occur:  1. Area Radiation Monitor Alarm 2. Containment Evacuation Alarm 3. Unevaluated direct radiation dose rate increase in excess of 100 mrem/hour above normal levels.  4. Unexpected airborne radioactivity concentration in excess of 1 x 10-9 micro Ci/cc. 5. Removable radioactive surface contamination in an unposted area in excess of 1000 dpm/100 cm2 beta-gamma over an area 100 ft2. 6. Removable radioactive surface contamination in an unposted area in excess of 50 dpm/100 cm2		Non-RIE Removed discussion of Local Evacuation. Since these may occur outside declared emergency events, they are addressed by station abnormal procedures
225.	alpha over an area 100 ft2.  Personnel Actions  When the containment evacuation alarm is activated or when the Emergency Coordinator makes notification over the public address system that a local evacuation has been declared, non-essential FPL and contract personnel, and visitors in the area will go to the designated assembly area and remain there for personnel accountability and monitoring. Plant visitors are escorted at all times by a trained person who is accountable for them. They will also be informed by their escort during any emergency of what they are expected to do during the emergency. When a local evacuation is declared, the Security Force will assist in personnel accounting and be prepared to brief the SM/Emergency Coordinator.	[CEP – J.1] Visitors within the Protected Area are escorted by badged individuals. The escort is responsible for controlling and directing their assigned visitors regarding actions required by any announcements and alarms. [CEP – J.1.a] Site evacuation is required following a Site Area Emergency or General Emergency unless delayed due to safety issues. The sounding of an alarm over the public address system occurs for the initiation of site evacuation.	Non-RIE Removed discussion items and procedure level details.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Precautions  Every effort will be made to minimize personnel exposure to radiation. Personnel who have been in the area of an evacuation should remain in a group and should not mix with other personnel in the assembly area until they have been monitored for possible contamination, unless they are injured. Injured personnel will be treated by the First Aid Team. Provisions exist for off-site treatment of personnel, if required (see Section 2.5).		
226.	Evacuation Implementation The SM/Emergency Coordinator will announce the local evacuation over the public address system, identifying the area affected, the assembly point and other instructions as required. All personnel in the evacuated area will stop work, turn off potentially hazardous equipment and leave the area. All personnel in the evacuated area should report to the designated assembly area for monitoring and accountability. The SM/Emergency Coordinator will activate the Emergency Response Organization as required. The SM/Emergency Coordinator, and department supervisors and foremen having personnel working in the evacuated area, will assist in verifying that all personnel are accounted for. The SM/Emergency Coordinator will initiate a search for personnel who have not been accounted for.	[CEP J.1.a] Site evacuation is required following a Site Area Emergency or General Emergency unless delayed due to safety issues. The sounding of an alarm over the public address paging system occurs for the initiation of site evacuation. When a site evacuation occurs, ERO and other essential personnel respond to their designated response facilities/areas. Non-essential personnel inside the Protected Area typically exit to the OCA by following normal RP and Security processes and proceed to a designated assembly area. Further evacuation of non-essential personnel inside the OCA occurs as warranted for the particular site. A process is in place to perform a rapid evacuation of the Protected Area without onsite monitoring and OCA assembly if conditions warrant. Monitoring in this instance is performed at an offsite location.	Non-RIE Removed procedure level information from CEP and information who performs what action. ERO responsibilities are provided in Section B.1.a
227.	2. Owner Controlled Area Evacuation Definition An Owner Controlled Area Evacuation is the orderly withdrawal of all non- essential personnel from the Owner Controlled Area (OCA), including the Protected Area (PA). Criteria An Owner Controlled Area Evacuation can be initiated at the discretion of the EC and is signaled by the sounding of the evacuation alarm followed by instructions given over the public address system.	[CEP – J.1.a] Site evacuation is required following a Site Area Emergency or General Emergency unless delayed due to safety issues. The sounding of an alarm over the public address paging system occurs for the initiation of site evacuation. When a site evacuation occurs, ERO and other essential personnel respond to their designated response facilities/areas. Non-essential personnel inside the Protected Area typically exit to the OCA by following normal RP and Security processes and	Non-RIE Title Changes Shift Manager and Site Emergency Director are responsible for onsite protective actions. No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
#	Evacuation of the OCA will normally occur at a Site Area Emergency or General Emergency unless such action is deemed unwarranted by the EC (i.e., personnel would be placed at greater risk).	proceed to a designated assembly area. Further evacuation of non-essential personnel inside the OCA occurs as warranted for the particular site.  A process is in place to perform a rapid evacuation of the Protected Area without onsite monitoring and OCA assembly if conditions warrant. Monitoring in this instance is performed at an offsite location.  [CEP – B.1.a]  The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):  1. Control Room (CR)  A. Shift Manager  • Site Assembly and Accountability  • Site Evacuation	Change Type
		<ul> <li>2. Technical Support Center (TSC)</li> <li>A. Site Emergency Director</li> <li>Site Assembly and Accountability</li> <li>Site Evacuation</li> </ul>	
228.	Responsibilities The EC advises the TSC Security Supervisor of evacuation of the OCA either directly or via the evacuation alarm and/or the public address system. Information needed by the Security Force to properly fulfill their responsibilities during the evacuation is provided to the TSC Security Supervisor by the EC. Significant responsibilities during the evacuation include directing the evacuation movements and personnel accountability.  The EC will direct that a search be initiated for any personnel not accounted for.  Evacuation Preparedness The population within the OCA is approximately 1300, including workers who may be present on-site at shift change.  All visitors will have adequate transportation available to evacuate all members of their respective groups.	[CEP – J.1] Visitors within the Protected Area are escorted by badged individuals. The escort is responsible for controlling and directing their assigned visitors regarding actions required by any announcements and alarms. [CEP – J.4] Typically, accountability of personnel inside the Protected Area is completed within 30 minutes of event declaration. Following a hostile action event, the personnel accountability process is initiated following containment or cessation of the threat. Missing individual(s) will be identified by Security. Appropriate actions will be taken to locate missing individual(s). When necessary, search and rescue team(s) will be dispatched to locate and, if necessary, rescue missing individual(s).	Non-RIE Removed procedure level information from CEP and information not relative to function. No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	The Security Force will assist in arranging for required transportation.		
	Escorts accompanying visitors will assure that transportation is available at all times while the visitors are on-site. Escorts will maintain controls of groups of individuals to which they are assigned to enable all members of the groups to be located, notified, and evacuated in the event that evacuation of the OCA is called for.  Procedures used by the Security Force define which evacuation route(s) will be used by the various groups in the OCA.		
229.	Evacuation Implementation	[CEP – J.1.a]	Non-RIE
	The EC will sound the evacuation alarm and announce instructions for evacuation of the OCA over the public address system. Upon hearing the alarm and/or evacuation order, all non-essential personnel will evacuate. ERO personnel will report to the TSC, OSC, or EOF for assignment.  The EC will notify the TSC Security Supervisor that an Owner Controlled Area Evacuation is ordered and will advise him/her of all pertinent information affecting the evacuation, including priorities and/or special conditions which exist to enable the evacuation to be conducted in a safe manner. Security will assign specific areas of the OCA, outside the PA, for which they are responsible for personnel notification.  The TSC Security Supervisor will immediately initiate the evacuation procedures for the OCA, outside the PA including: (these actions may occur at the Alert	Site evacuation is required following a Site Area Emergency or General Emergency unless delayed due to safety issues. The sounding of an alarm over the public address paging system occurs for the initiation of site evacuation.  When a site evacuation occurs, ERO and other essential personnel respond to their designated response facilities/areas. Non-essential personnel inside the Protected Area typically exit to the OCA by following normal RP and Security processes and proceed to a designated assembly area. Further evacuation of non-essential personnel inside the OCA occurs as warranted for the particular site.  A process is in place to perform a rapid evacuation of the Protected Area without onsite monitoring and OCA assembly if conditions warrant. Monitoring in this instance is performed at an offsite location.  [CEP J.4]	Removed specific ERO Titles, procedure level details.  No added, removed or altered commitments or change of intent.
	level)  1. Notification of all security patrols and tour guides of the evacuation.  2. Notification of all non-company groups working in or using portions of the OCA.  3. Initiate sweeps of recreation areas and assist in personnel accountability.	The emergency alarm, together with the public address system, is used to alert and notify on-site personnel of the need for assembly at a Site Area or General Emergency classification level (or earlier at the discretion of the Emergency Director).  ERO personnel report to their assigned emergency response facility.	
	in personnel accountability. Upon declaration of an Owner Controlled Area	response facility. Typically, accountability of personnel inside the	

	# Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Evacuation, the Security Force will conduct personnel accountability in accordance with emergency procedures. An initial list of individuals in the PA is established in 30 minutes and continuously updated until all individuals are accounted for. The number of security officers on duty at any time is adequate to handle the evacuation of personnel in the OCA should such an action be called for by the EC.	Protected Area is completed within 30 minutes of event declaration. Following a hostile action event, the personnel accountability process is initiated following containment or cessation of the threat. Missing individual(s) will be identified by Security. Appropriate actions will be taken to locate missing individual(s). When necessary, search and rescue team(s) will be dispatched to locate and, if necessary, rescue missing individual(s).  After initially completed, accountability will be maintained continuously throughout the emergency for personnel inside the Protected Area.	
23	When an evacuation is ordered, all non-essential personnel shall exit the PA via their normal gate unless otherwise directed by the EC. Non-essential personnel shall travel from the plant site following the designated evacuation route. Figure 5.2 shows the evacuation route(s) for personnel. It is expected that the primary evacuation route will not be affected by adverse weather or traffic conditions. If a release is in progress and the potential exists for contamination of evacuees, they will be directed to an off-site assembly area. The primary assembly area for evacuated personnel is the Jaycee Public Park on Highway A1A, located approximately 7 ½ miles north of the plant on the road to Ft. Pierce. The alternate assembly area, south of the plant, is Jensen Public Beach Parking Area. All personnel will be requested to remain at the assembly area until instructed otherwise.	CEP J.2]  Designated offsite locations for site evacuees, and the process to use them, have been identified through coordination with local emergency management personnel.  The site evacuation process takes into consideration meteorological and radiological data, weather and other travel hazards.  On-site personnel will evacuate the site when directed. Site evacuation routes and evacuation locations are contained in the site annexes.  [PSL Annex J.2]  When an evacuation is ordered, all non-essential personnel shall exit the PA via their normal gate unless otherwise directed by the EC. Non-essential personnel shall travel from the plant site following the designated evacuation route. Figure J.2-1 shows the evacuation route(s) for personnel. It is expected that the primary evacuation route will not be affected by adverse weather or traffic conditions. If a release is in progress and the potential exists for contamination of evacuees, they will be directed to an off-site assembly area. The primary assembly area for evacuated personnel is the Jaycee Public Park on Highway A1A, located approximately 7 ½ miles north of the plant on the road to Ft. Pierce. The alternate assembly area, south of the plant, is Jensen Public Beach Parking Area. All personnel	Editorial No added, removed or altered commitments or change of intent.

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		will be requested to remain at the assembly area until instructed otherwise.	
231.	3. Off-site Area Protective Measures An off-site area evacuation is the orderly withdrawal of all persons from the portion of the public areas surrounding the plant which have been affected by the emergency. The criteria for the initiation of the evacuation are determined by the Department of Health as specified in the State Plan. Appendix III of the State Plan describes evacuation measures and provides maps indicating designated evacuation routes.		Non-RIE Removed wording describing contents of State Plan.
232.	Evacuation time estimates have been performed in accordance with NUREG/CR- 7002. Annually, an analysis is performed for population changes. Figure 5-3 (Figure III-21 in the State Plan) is a map of the evacuation routes for the general public. Maps and text describing evacuation routes, monitoring points, and reception centers are provided in the State Plan.	[CEP J.7]  NextEra offsite protective action recommendation strategies, informed by the ETE report, have been developed using guidance provided in NUREG-0654/FEMA-REP-1, Supplement 3, Guidance for Protective Action Strategies, in coordination with the state and local agencies.  [CEP J.8.a]  The most recent ETEs are incorporated by reference into this emergency plan. Refer to the site annexes for specific reference to the ETE study.  Updated ETE studies will be submitted to the NRC under 10 CFR 50.4 no later than 365 days after NextEra determines that the criteria for updating the ETE have been met and at least 180 days before using it to form protective action recommendations and providing it to state and county governmental authorities for use in developing offsite protective action strategies.  During the years between decennial censuses NextEra will estimate EPZ permanent resident population changes once a year, but no later than 365 days from the date of the previous estimate, using the most recent U.S. Census Bureau annual resident population estimate and state/county government population data, if available. NextEra will maintain these estimates so that they are available	Editorial Added wording to align with CEP. No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		for NRC inspection during the period between decennial censuses and will submit these estimates to the NRC with any updated ETE report.  The criteria that require a full update to the site ETE study is as follows:  1. The availability of the most recent decennial census data from the U.S. Census Bureau;  OR  2. If at any time during the decennial period, the EPZ permanent resident population increases such that it causes the longest ETE value for the 2-mile zone or 5-mile zone, including all affected emergency response planning areas, or for the entire 10-mile EPZ to increase by 25 percent or 30 minutes, whichever is less, from the currently NRC approved or updated ETE.  [CEP J.10.a]  Details on evacuation routes, evacuation areas, reception centers in host areas, and shelter areas are provided in the site ETE report.  [CEP J.10.b]  Details on population distribution around the NextEra sites, by evacuation areas, are provided in the site ETE report.  [PSL Annex J.8.a]  The PSL site specific ETE report is documented in EP-PSL-123, PSL Evacuation Time Estimate Study.	
233.	The EC (RM when the EOF is operational) will recommend offsite protective actions based on the criteria shown in Figure 5-1, Protective Action Recommendations.	[CEP J.9] Applicable plume exposure pathway EPZ PARs of evacuate and shelter are developed at the General Emergency classification level and provided to the ORO personnel responsible for making protective action decisions.  PARs are communicated using the initial notification form and process. See Section E for a discussion of emergency notification.	Editorial  No added, removed or altered commitments or change of intent.
234.	The St. Lucie and Martin County Public Safety/Emergency Management Directors and the		Non-RIE Removed wording describing

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	State Division of Emergency Management will be responsible for the direction and implementation of the necessary protective actions as specified in the State Plan, including notification and coordination with other State and local assistance agencies.		contents of County Plans.
235.	It will be the responsibility of the St. Lucie and Martin County Public Safety Departments to notify the general public if an evacuation is warranted. This will be accomplished as discussed in Sections 5.2.4 and 5.2.8.		Non-RIE Removed wording describing contents of County Plans.
236.	The State Plan describes the basis for the choice of recommended actions for the Plume Exposure Pathway EPZ during emergency conditions. Protective action decisions are made on the basis of information which becomes available as a result of accident assessment. The Bureau of Radiation Control Standard Operating Procedures also discuss the process by which state officials collect information and make recommendations. The Bureau of Radiation Control Standard Operating Procedures also discuss assessment actions which would form a basis for recommendations. The State and County Plans point out that EPA Protective Action Guides will be an important basis for Protective Action Recommendations (PARs).	[CEP – J.6]  NextEra sites have developed PARs, in accordance with agreements made with the state agencies,	Non-RIE Removed wording describing contents of State Plan.
237.	4. Public Warning and Information Chapter 5, Section III to the State Plan, provides information on warning of the public, in general, and Appendix III Section VI discuss warning procedures in St. Lucie and Martin Counties, in particular. Prompt notification systems are discussed therein. FPL has purchased and installed an alert (siren) and notification system as described in Section 5.2.8. Notification to the population and arrangements with public communications media are described in the State Plan. Chapter 7 to the State Plan provides the guidance for keeping the public informed about the potential hazards, emergency response, and protective measures that can be taken to minimize or	[CEP G.5] The news media will be provided materials to acquaint them with emergency planning effort at the NextEra specific site(s) annually. Typical content includes site information, information concerning radiation, emergency planning, and points of contact for release of information to the media during an emergency.	Non-RIE Removed wording describing contents of State Plan.

# Current Emergency Plan **Common Emergency Plan and Site Annex Change Type** avoid public health effects. Chapter 7 also provides procedures for the timely and accurate collection. coordination, and dissemination to the public of such information. Chapter 7, Figures 7-1 to 7-8 of the State Plan also provides for sample releases to be used for media. These are consistent with FPL's classification scheme. These are examples of specific prior arrangements that have been made to use public communication media for issuing emergency instructions to the public. Section VIII of Appendix III discusses annual orientation of the media. Section VI of Appendix III indicates TV and radio stations which would be used to alert the public. 238. Non-RIE Population Exposure Estimates Population exposure estimates are discussed in Removed wording describing Chapter 13, Section IV of the State plan. Bureau of contents of State Plan. Radiation Control Standard Operating Procedures discuss the projected dose calculation process and assessment and monitoring in the Ingestion Exposure Pathway EPZ. Standard Operating Procedures are used to determine dose rates. Non-RIE 239. Special Needs Population Removed wording describing Section XII of Appendix III of the State Plan contains a discussion of evacuation of special need contents of State Plan. populations. 240. Population Distribution Non-RIE The State Plan contains maps showing population Removed wording describing contents of State Plan. distribution, and it describes the means for notifying transient and resident population. Population maps Population information contained in and tables are included in Appendix III of the State ETE Study which is part of overall Plan (St. Lucie Site Plan). PSL plan. **2.** 8. Alert and Notification System (ANS) [CEP - E.2] **Editorial** FPL has purchased an alert and notification system Detailed ANS information is maintained in the ANS Details on ANS contained in FEMA for use by the St. Lucie and Martin County Public design report for each site as listed in the site approved design report, which is Safety/Emergency Management Directors in alerting considered part of plan. annexes.

### # Current Emergency Plan

Route Altering, which is contained in the Radiological

Response Plans and procedures for the State of

Florida and Offsite response Organizations in the

accordance with Title 44 of the Code of Federal

EPZ that have been approved by FEMA in

Regulations (CFR) 44CFR350.12 and 14.

# the population of the need to possibly take protective actions. The system consists of 91 electronic sirens located throughout the Plume Exposure Pathway EPZ. These electronic sirens have public address capability for voice messages. Upon sounding the sirens, the affected public, keyed through the public information program, should turn on their radios to the local Emergency Alert System (EAS) radio station and await emergency information and instructions. Backup Alert Notification System for the St. Lucie Nuclear Power Plant is achieved through physical

### **Common Emergency Plan and Site Annex**

### [PSL Annex -- E.2.1]

# PSL ANS used to alert and notify the general public within the plume exposure pathway EPZ is described as follows.

### 1. General Description

The ANS (activated by the OROs) is the primary general public notification system. The ANS is designed to provide an alerting signal throughout the population on an area wide basis throughout the 10-mile EPZ. The OROs, after the alert signal, provide an informational or instructional message to the population via various methods as approved by FEMA.

Alerting, warning, and notification of the public are actions taken by government agencies to provide prompt instructions to the public. As such, government agencies will take actions for areas in the EPZ not covered by ANS, such as waterways, unpopulated wooded areas, and the like; as described in ORO emergency operating plans, guidelines, and procedures.

Should the primary alerting or notification signal fail, ORO plans maintain the FEMA approved back-up alert process.

### 2. Concept of Activation and Operation

ANS is available and operational in the 10-mile EPZ. The ANS provides an alerting signal to essentially 100% of the population on an areawide basis throughout the 10-mile EPZ within 15 minutes from the time the cognizant OROs have determined the need for such alerting exists. System testing is used to satisfy FEMA requirements ensuring adequate coverage of the population within the 10-mile EPZ. The emergency plans of each state include evidence of EAS preparation for emergency situations and the means for activating the system. ANS performance is verified via automated reports generated after activation or testing. Activating the ANS requires procedures and

### **Change Type**

No added, removed or altered commitments or change of intent.

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		notifications between the site and the OROs. Activation of the ANS for prompt (within about 15 minutes) alerting and notification of the public within the plume exposure pathway EPZ is the responsibility of the OROs. NextEra is responsible for ensuring the operability of the ANS.  To ensure ANS is maintained, the system is tested on a periodic basis as described in Element F.3 that meets or exceeds FEMA guidance. PSL personnel are notified of failed tests and initiate corrective actions to return ANS equipment to full operational readiness in a timely manner to meet FEMA operability requirements as referenced in the FEMA Radiological Emergency Preparedness Program Manual.  Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-PSL-125, PSL Alert and Notification System Design Report.	
241.	5.3 Radiological Exposure Control 1. On-site Radiation Protection Program An objective of emergency response is to minimize radiation exposure to individuals both on-site and offsite. Situations may arise, however, when observance of this goal is inconsistent with personnel or plant safety. In anticipation of such needs, guidelines have been established for emergency conditions. The guidelines on which the emergency radiation protection program is based are stated below.	[CEP – K] Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.	Non-RIE CEP uses Planning Standard wording as introduction to plan sections. No added, removed or altered commitments or change of intent.
242.	Exposure to emergency response personnel should be maintained As Low As Reasonably Achievable (ALARA). Actions taken during an emergency should take into consideration the amount of exposure required to accomplish the task verses the potential benefit to the public health and safety.	[CEP – K.1] Approval is required if emergency workers are expected to receive dose in excess of 10 CFR 20 occupational dose limits. ALARA practices are utilized during emergencies as much as practical.	Editorial No added, removed or altered commitments or change of intent.
243.	Conditions may warrant re-entry into high radiation areas leading to exposure in excess of the regulatory limit. Except for rescue of personnel (life-saving only),	[CEP K.1] Approval is required if emergency workers are expected to receive dose in excess of 10 CFR 20	Non-RIE Site Emergency Director approves emergency exposures.

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	authorization must be given in advance by the Emergency Coordinator (EC) in consultation with the TSC RP Supervisor. If time permits the EC should obtain concurrence from the Recovery Manager (if the EOF is operational). In any case where regulatory limits have been exceeded the EC shall notify the RM of the event.	occupational dose limits. ALARA practices are utilized during emergencies as much as practical.  [CEP K.2]  Section B.2.a describes the responsibility for authorization of exposures to radiation in excess of 10 CFR 20 limits. Such authorizations are documented as part of the emergency exposure controls process provided in Element K.1.c.	No added, removed or altered commitments or change of intent.
244.	For those remote circumstances involving an event in progress, and obtaining EC approval will result in leaving the accident scene or decrease the victim(s) chance of survival, lifesaving actions may be performed without obtaining EC approval. The EC shall be notified immediately following the rescue operation.  Re-entry personnel that have been selected/chosen to exceed regulatory exposure limits should be volunteers, broadly familiar with the risks involved (radiosensitivity of fetuses, effects of acute exposures, etc.), and whose normal duties have trained them for such missions.  EPA 400, "Manual of Protective Action Guides and Protective Actions for Nuclear Incidents," EPA 400-R-92-001 states that "To assure adequate protection of minors and the unborn during emergencies, the performance of emergency services should be limited to non-pregnant adults." FPL endorses this guidance; however, FPL recognizes that it is the right of the worker to make the decision to perform as an on-site emergency worker, understanding the potential risks involved.	CEP K.2.a] All personnel dispatched into radiation areas or areas of unknown radiation levels are briefed on the task and environmental conditions and are provided appropriate monitoring and personnel protective equipment.  Refer to Element K.1.a for the description of activities and their exposure thresholds and considerations.	Non-RIE Wording revised to align with the CEP.
245.	5.3 2. Dose Records FPL Nuclear Division procedures provide for conducting the personnel dosimetry program. The company has the capability of determining personnel radiation exposures on a 24 hour per day basis. Dose records for all individuals exposed to ionizing radiation at FPL's facilities are maintained.	[CEP K.1.c] Personnel dosimeters are issued to and worn by NextEra radiation worker qualified personnel who may be required to work in Radiological Controlled Areas in accordance with radiation protection procedures. Radiation protection personnel in the OSC and TSC have the responsibility to monitor and assess the	Editorial  No added, removed or altered commitments or change of intent.

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		radiation doses received by ERO personnel on a 24-hour per day basis throughout a declared event.  Personnel dose records are documented and managed using a computerized system. Should this system not be readily accessible or available, personnel dose is manually recorded.  Dosimeters are available and will be provided to offsite agency responders if they are required to enter a Radiological Controlled Area or are expected to receive a dose in excess of 100 mRem for the event.	
246.	All emergency response personnel under the authority of FPL who will potentially be exposed to radiation in the course of their duties will be monitored by the plant radiation exposure monitoring program. Personnel in this category will be issued the appropriate personal dosimetry devices.	[CEP K.1.b] Emergency worker exposure is monitored at the time of exposure by the use of electronic dosimeters. If direct measurement of airborne concentrations is not available at time of exposure, workers will be provided respiratory protection, when feasible, and total exposures will be calculated after the fact using follow up survey data and whole body counting equipment. [CEP K.1.g] The site access process into the protected area for local support organizations responding on site during an emergency is controlled by site security personnel. Non-NextEra emergency workers supporting on-site activities will be issued dosimetry and/or be monitored by radiation protection personnel when responding to areas where a radiation dose may be received.	Editorial  No added, removed or altered commitments or change of intent.
247.	Since, by their very nature, emergency exposures requiring immediate action are not planned, they are not controlled as a Planned Special Exposure. Dose received from exposure under emergency conditions will be added to the dose received during the current year, prior to the emergency, to determine compliance with the occupational dose limits in 10 CFR 20.  Doses above regulatory limits will require reporting pursuant to 10 CFR 20.2202 and 20.2203. Any dose in excess of the annual limits specified in Section 20.1201(a) will be accounted for in accordance with	a radiation about may be resolved.	Non-RIE Removed requirements controlled by guidance outside Emergency Plan.

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	10 CFR 20.1206(e). If an individual exceeds any of these limits, then that individual will not be available for additional dose under 20.1201(a).		
248.	3. Contamination Control and Decontamination Procedures.  A personnel decontamination washroom and shower room with chemical decontamination agents is provided on the ground floor of the Auxiliary Buildings. Except in cases of serious injury, accepted decontamination practices will be employed on-site. Life endangering injuries or injuries such as extensive burns, serious wounds, or fractures shall receive prompt attention in preference to decontamination. Personnel with injuries involving radiation or radioactive contamination will be handled as discussed in Section 2.5.1.  Decontamination of uninjured personnel must be attempted at contamination levels greater than minimum detectable activity as defined in Health Physics / Radiation Protection procedures.	[CEP K.1.d] Radiation safety controls are established 24 hours per day to contain the spread of loose surface radioactive contamination. Contamination control limits are defined in radiation protection procedures. Personnel leaving the contaminated areas are monitored to ensure that they are not radioactively contaminated. [CEP K.1.e] Personnel decontamination is performed using normal radiation protection procedures in on-site facilities. Personnel decontamination facility locations are described in the site annexes. Contamination on personnel will be removed in accordance with established radiation protection procedures. [PSL Annex K.1.e,3] Decontamination Facility - The Site Assembly Station personnel decontamination capabilities consist of utilizing various types of decontamination agents, such as waterless cleaners and decontamination foams. A quantity of cloth material is available for use with these decontamination agents. Contamination monitoring is performed through the use of count rate instruments with beta sensitive probes. Extra clothing for personnel whose personal clothing has been contaminated is available in the form of disposable garments. Decontamination of vehicles will be handled following the accident. Methods for decontamination and monitoring are described in plant procedures.	Editorial No added, removed or altered commitments or change of intent.
249.	Any item of equipment, once having been taken inside a controlled area, requires a survey for possible contamination prior to its removal from the controlled area. Equipment regularly required within a	[CEP – K.1.d] Radiation safety controls are established 24 hours per day to contain the spread of loose surface radioactive contamination. Contamination control	Non-RIE Removed contamination limits from CEP – controlled by RP procedures.

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	controlled area will be maintained within the controlled area. Areas within the Plant or items suspected of contamination will be checked before normal use is permitted. Laboratory analysis of swipes will be undertaken, and an area or item will be declared suitable for normal use if contamination levels are less than 1,000 dpm/100 cm2. Should contaminated equipment be discovered, it will be stored and either decontaminated or disposed of in accordance with Plant procedures.	limits are defined in radiation protection procedures. Personnel leaving the contaminated areas are monitored to ensure that they are not radioactively contaminated.  [CEP K.1.e]  Equipment will be released for use outside of the contaminated areas only when radioactive contamination is within acceptable limits. All equipment must be checked for contamination before being taken from a known contaminated area.  Equipment and material decontamination is performed using normal radiation protection procedures.	
250.	Food for emergency workers will be brought in from off-site, if necessary. The plant drinking water is obtained from the Ft. Pierce water supply. It is unlikely that ingestion of contaminated food or water will occur.  Frequent surveys of habitable areas utilized for emergency response (i.e. Control Room, TSC and OSC) will be performed to assure these areas remain uncontaminated. Special attention to drinking water and food supplies will be given to assure that these supplies remain uncontaminated.	[CEP – K.1.d] Radiation safety controls are established 24 hours per day to contain the spread of loose surface radioactive contamination. Contamination control limits are defined in radiation protection procedures. Personnel leaving the contaminated areas are monitored to ensure that they are not radioactively contaminated.	Non-RIE Site Radiation Department procedures will be used to ensure control of contamination.
251.	4. Radioactive Wastes Radioactive wastes (resins, trash, etc.) accumulated during an emergency will be handled by normal plant procedures. Any special circumstances will be handled on a case-by-case basis.		Non-RIE Removed wording stating use on normal plant procedures to handle radwaste.
252.	5.4 Recovery and Re-entry 1. On-site Once the hazard potential has passed, steps must be taken to recover from the incident. All actions should be preplanned in order to limit exposures. Access to the area will be controlled and personnel exposures will be documented.	[CEP M.1.a] Reentry can occur during the plume or post-plume phase and refers to the temporary movement of people into an area of actual or potential hazard. Personnel who have been evacuated or relocated from a restricted area may be allowed to reenter under controlled conditions to perform additional emergency response activities.  Reentry into the OCA will be based on site conditions. During or following a HAB incident, reentry criteria	Editorial  No added, removed or altered commitments or change of intent.

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		take into consideration site security and threat conditions.	
253.	The Recovery Manager/EC has the responsibility for determining when the on-site conditions are stable and it is appropriate to enter the recovery phase. The Recovery Organization consists of an augmented Expanded Emergency Response Organization consisting of existing FPL emergency personnel and additional resources from both the company and contracted agencies. The Emergency Response Managers would continue their assigned duties with additional personnel to use as necessary. The Recovery Manager (or EC) will evaluate the status of the plant by reviewing all current and pertinent data available from emergency response and/or monitoring teams. The recovery phase will begin only when plant conditions are stable and the following guidelines are met:  1. Radiation levels in all in-plant areas are stable or decreasing with time.  2. Releases of radioactive materials to the environment from the plant are under control or have ceased.  3. Any fire, flooding, or similar emergency conditions are controlled or have ceased.  4. The reactor is in a stable condition.  At the time of initiating activities to enter the recovery phase, the Recovery Manager will be responsible for informing all applicable agencies (e.g., Federal, State, and local agencies) that on-site conditions have stabilized and activities for recovering from the incident can now begin. Once these agencies have been informed, the Recovery Manager has the authority to de-escalate the emergency classification. Planned recovery actions which may result in a radioactive release will be evaluated by the Recovery Manager and his/her staff in advance. Such planning and data pertaining to the possible release will be reported to the appropriate off- site emergency	[CEP - M.3] Steps will be taken to terminate from the event, either directly or following a transition period (prior to entering a state of recovery operations). Usually, the Unusual Event and Alert classification levels will be directly terminated (no entry into recovery). Items that must be considered before terminating the emergency condition to either a normal or a recovery organization are as follows:  • Emergency Action Level criteria  • Releases of radioactive materials to the environment  • In-plant radiation levels  • Plant stable and long term core cooling available  • Containment integrity  • Functionality and integrity of plant systems, facilities, power supplies, equipment, and instrumentation  • Fire, flood, earthquake or similar hazardous emergency conditions  • Security issues  • Site access not limited for personnel and support services  Decisions to relax protective actions for the public will be made by the appropriate state authorities. When transition from an emergency to a recovery phase is necessary, the Emergency Director will designate a Recovery Manager and develop a recovery organization.  The Emergency Director will inform the ERO, OROs, and NRC upon exiting the state of emergency and either returning to normal organizational control or entering recovery.	Non-RIE Added guidance on terminating events. No added, removed or altered commitments or change of intent.

one or more of the following reasons:  1. To ascertain that all personnel who were in affected area have been evacuated, or to search for unaccounted personnel.  2. To assist in evacuating injured or incapacitated personnel from the affected area.  3. To perform operations which may mitigate the effect of the emergency or hazardous condition.  4. To determine the nature and extent of the emergency and/or radiological conditions.  5. To establish definite personnel exclusion area boundaries.  Re-entry to the affected area on-site will take place only under the authority of the Emergency Coordinator. The TSC RP Supervisor is responsible for evaluating the existing emergency conditions and informing the Emergency Coordinator of the advisability of re-entry. For emergencies inside the Radiation Controlled Area (RCA), the TSC RP Supervisor will supervise the initial entry of the Emergency Response Organization personnel and all subsequent entries until radiation areas have been properly marked.  More detailed guidance for re-entry teams is contained in plant procedures.  (organized by facility):  1. Control Room (CR)  A. Shift Manager  OSC Team Priorities, Dispatch and Control  ERO Radiological Protection  OSC Team Priorities, Dispatch and Control  ERO Radiological Protection  OSC Team Priorities, Dispatch and Control  ERO Radiological Protection  OSC Team Priorities, Dispatch and Control  ERO Radiological Protection  OSC Team Priorities, Dispatch and Control  ERO Radiological Protection  OSC Team Priorities, Dispatch and Control  ERO Radiological Protection  OSC Team Priorities, Dispatch and Control  ERO Radiological Protection  OSC Team Priorities, Dispatch and Control  ERO Radiological Protection  (ERP -M.1.a]  Reentry can occur during the plume or post-plume phase and refers to the temporary movement of people into an area of actual or potential hazard.  Personnel who have been evacuated or relocated from a restricted area may be allowed to reenter under controlled conditions to perform additional emergency resp	#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
entering the recovery phase. Re-entry into an evacuated area will be made by the Emergency Response Organization personnel when required for one or more of the following reasons:  1. To ascertain that all personnel who were in affected area have been evacuated, or to search for unaccounted personnel.  2. To assist in evacuating injured or incapacitated personnel from the affected area.  3. To perform operations which may mitigate the effect of the emergency or hazardous condition.  4. To determine the nature and extent of the emergency and/or radiological conditions.  5. To establish definite personnel exclusion area boundaries.  Re-entry to the affected areas on-site will take place only under the authority of the Emergency Coordinator. The TSC RP Supervisor is responsible for evaluating the existing emergency conditions and informing the Emergency Coordinator of the advisability of re-entry. For emergencies inside the Radiation Controlled Area (RCA), the TSC RP Supervisor will supervise the initial entry of the Emergency Response Organization personnel and all subsequent entries until radiation areas have been properly marked.  More detailed guidance for re-entry teams is contained in plant procedures.  255. 2. Off-site  State and County officials would be in control of recovery and re-entry off-site. Population exposure estimates are discussed in the State plan. Chapter 11 discusses the Ingestion Exposure Pathway EPZ. The State Plan (Chapter 13, Recovery and Re-entry) also discusses population dose measurement.		response organizations and agencies.		
State and County officials would be in control of recovery and re-entry off-site. Population exposure estimates are discussed in the State plan. Chapter 11 discusses the Ingestion Exposure Pathway EPZ. The State Plan (Chapter 13, Recovery and Re-entry) also discusses population dose measurement.  The recovery organization will coordinate NextEra environmental sampling activities with the state agencies. Refer to Element C.4 for a description of laboratory capabilities.  State and County continue to be in control of post event dose estimates. PSL recovery organization will coordinate NextEra environmental sampling activities with the state agencies. Refer to Element C.4 for a description of laboratory capabilities.	254.	Re-entry into an affected area may be required before entering the recovery phase. Re-entry into an evacuated area will be made by the Emergency Response Organization personnel when required for one or more of the following reasons:  1. To ascertain that all personnel who were in affected area have been evacuated, or to search for unaccounted personnel.  2. To assist in evacuating injured or incapacitated personnel from the affected area.  3. To perform operations which may mitigate the effect of the emergency or hazardous condition.  4. To determine the nature and extent of the emergency and/or radiological conditions.  5. To establish definite personnel exclusion area boundaries.  Re-entry to the affected areas on-site will take place only under the authority of the Emergency Coordinator. The TSC RP Supervisor is responsible for evaluating the existing emergency conditions and informing the Emergency Coordinator of the advisability of re-entry. For emergencies inside the Radiation Controlled Area (RCA), the TSC RP Supervisor will supervise the initial entry of the Emergency Response Organization personnel and all subsequent entries until radiation areas have been properly marked.  More detailed guidance for re-entry teams is	The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):  1. Control Room (CR)  A. Shift Manager  • OSC Team Priorities, Dispatch and Control  • ERO Radiological Protection  2. Technical Support Center (TSC)  A. Site Emergency Director  • OSC Team Priorities, Dispatch and Control  • ERO Radiological Protection  H. TSC Radiation Protection Coordinator  • OSC Team Priorities, Dispatch and Control  • ERO Radiological Protection  [CEP – M.1.a]  Reentry can occur during the plume or post-plume phase and refers to the temporary movement of people into an area of actual or potential hazard. Personnel who have been evacuated or relocated from a restricted area may be allowed to reenter under controlled conditions to perform additional emergency response activities.  Reentry into the OCA will be based on site conditions. During or following a HAB incident, reentry criteria take into consideration site security and threat	Title Changes
256. TABLE 5-1, SOURCES OF METEOROLOGICAL [CEP – H.7] Editorial	255.	State and County officials would be in control of recovery and re-entry off-site. Population exposure estimates are discussed in the State plan. Chapter 11 discusses the Ingestion Exposure Pathway EPZ. The State Plan (Chapter 13, Recovery and Re-entry) also	The recovery organization will coordinate NextEra environmental sampling activities with the state agencies. Refer to Element C.4 for a description of	State and County continue to be in control of post event dose estimates. PSL recovery organization will assist as
	256.	TABLE 5-1, SOURCES OF METEOROLOGICAL	[CEP – H.7]	Editorial

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	DATA	1. Meteorological Monitoring Each NextEra site has a permanent on site meteorological monitoring station for the acquisition and recording of wind speed, wind direction, and stability class for use in offsite dose projection. Meteorological information is displayed in the Control Room, TSC, and EOF. Refer to Chapter 2 of the UFSARs for descriptions of the meteorological monitoring systems.  [CEP – H.7]  1. Meteorological Monitoring Weather forecasts and certain meteorological data is available from the National Weather Service.	No added, removed or altered commitments or change of intent.
	FIGURE 5-1, PROTECTIVE ACTION RECOMMENDATIONS	[PSL Annex – J.6] The PSL site specific basis adaptation of NUREG-0654 Supplement 3 PARs is documented in in EP-PSL-124, PSL Protective Action Recommendation Technical Basis Manual.	Non-RIE PARs provided in PAR Tech Basis Manual which is considered part of the PSL Plan
258.	FIGURE 5-2, SITE EVACUATION ROUTES	PSL Annex Figure J.2-1: PSL Site Evacuation Routes	Editorial  No added, removed or altered commitments or change of intent.
	FIGURE 5-3, GENERAL PUBLIC EVACUATION ROUTES	[PSL Annex– J.8.a] The PSL site specific ETE report is documented in EP-PSL-123, PSL Evacuation Time Estimate Study.	Non-RIE Evacuation routes provided in ETE Study which is considered part of the PSL Plan
	Section 6.0, Public Information		
	6.1 Preparatory Public Information Program 1. Purpose The purpose of the preparatory public information program is to inform the public of how they would be notified and what their actions should be in a radiological emergency.	[CEP G.1] Annual distribution of safety information which contains educational information on emergency preparedness, sheltering, ANS, radiation, and telephone numbers of agencies to contact for more information.  Information for residents with special needs and non-English translations is incorporated per current federal guidance.	Editorial  No added, removed or altered commitments or change of intent.
261.	2. Program Execution Florida Power & Light Company has the responsibility	[CEP G.1] NextEra, in coordination with OROs, updates and	Editorial No added, removed or altered

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	for conducting the public information program with the support from the State Division of Emergency Management and the St. Lucie County and Martin County Departments of Public Safety.  Chapter 7 of the State Plan discusses the preparatory public information and education program. Education will be provided on an annual basis to local residents, transients, and news media in the manner described in Chapter 7, Section VII of the State Plan.  6.2 Florida Power & Light Company Emergency Public Information Program  This section delineates the organization, public information network, and facilities that would be made available as required in an emergency.		commitments or change of intent.
262.	1. Organization The members of the emergency public information organization (see Figure 6-1) and their respective responsibilities are as follows: Joint Information Center Manager The JIC Manager is a designated member of the Emergency Response Organization. He/she is the FPL official responsible for coordinating dissemination of information to the public via the news media if Corporate Communications has not assumed responsibility of dissemination of information. Insofar as practical, the JIC Manager will work with the NRC, State, and local news media representatives to effect coordinated releases and public appearances. He/she will work with other	[CEP – B.1.a] The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):  5. Joint Information System (JIS) / Joint Information Center (JIC) NextEra Corporate Communications and key business units maintain a staff to operate a Joint Information System. Refer to Sections H.5 and G for JIC/JIS details.  A. Site JIS Manager  • Facility/Group Management and Supervision  • Integration of Offsite Agency Personnel in the	Non-RIE Wording revised to align with CEP.

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	company officials to develop formal statements and responses. All press releases, other than routine "updating" of data coming from the Emergency Operations Facility, should originate with or be cleared by the JIC Manager. He/she will assure that exchange of information among designated spokespersons is accomplished in a timely manner, when possible.	ERF  • ERF Communications • Media Briefings • Facility ActivationG.3 G.3.a  A spokesperson is designated as the primary point of contact for NextEra and is responsible for the consistency of the information released by the utility. The spokesperson may select individuals to address the public on behalf of NextEra as their respective expertise is needed. This position is not designated as an ERO position.  [CEP G.3.a]  Arrangements are made for the exchange of information among the designated spokespersons that use various means and technologies as agreed upon by the particular agencies. NextEra will provide information and updates to the ORO and federal public information officers (PIOs) to address the emergency, including plant conditions and associated response actions.  OROs address public response and actions in accordance with their respective plans.	
263.	Nuclear Information Staff A staff of public information and technical personnel will be assigned as needed to the Joint Information Center. Their responsibilities will be to:  1. Provide technical briefings to the press.  2. Inform company employees through a newsletter, bulletin board statements, or other inplace networks.  3. Inform the industry, so other companies both in the United States and overseas can deal with questions as they arise from their local media.  4. Prepare background material for features, historical context, profiles, etc.  5. Handle the photographic needs of the company.  6. Record or transcribe all press conferences	[CEP – B.1.a] The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):  5. Joint Information System (JIS) / Joint Information Center (JIC) NextEra Corporate Communications and key business units maintain a staff to operate a Joint Information System. Refer to Sections H.5 and G for JIC/JIS details. A. Site JIS Manager  • Facility/Group Management and Supervision  • Integration of Offsite Agency Personnel in the ERF  • ERF Communications	Editorial  No added, removed or altered commitments or change of intent.

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	and other official proceedings for the benefit of company management, official agencies and the news media.  7. Accredit and escort members of the press.  8. Provide its own stenographic and typing services for news releases, photo captions, reports, transcripts, etc.  9. Provide reference services for maintaining files of releases and photos, obtaining newspapers, monitoring wire services and news broadcasts, logging all clippings.  The staff of the Florida Power & Light Company Corporate Communications Department may be augmented by personnel from other utilities, consultants, or universities.	<ul> <li>Media Briefings</li> <li>Facility Activation</li> <li>B. Site JIS Coordinator</li> <li>Media Briefings</li> <li>Accommodation of News Media Personnel</li> <li>Facility Activation</li> <li>Facility Operation</li> <li>C. Remote JIS Manager— Remote interface position to the corporate JIS</li> <li>Facility/Group Management and Supervision</li> <li>ERF Communications</li> <li>Media Statements</li> <li>Media Briefings</li> <li>Accommodation of News Media Personnel</li> <li>Media Monitoring</li> <li>Rumor Control</li> <li>[CEP – G.4]</li> <li>NextEra personnel coordinate with ORO and federal PIOs via the JIS, or in a JIC when activated, to identify and address public inquiries and inaccurate information.</li> <li>Public information personnel monitor media and public sources for misleading or erroneous information and to address inquiries. Rumors and misinformation are collected and provided to the appropriate individual or agency PIO. The PIOs assess and discuss the rumors and misinformation to coordinate responses.</li> </ul>	
3	2. Joint Information Center (JIC) The St. Lucie Plant Joint Information Center (JIC) is adjacent to the EOF. The JIC Manager will report to the EOF. A designated JIC Manager and his/her staff will man the JIC when the JIC Manager deems it appropriate. The JIC/EOF is located at the intersection of State Route 712 (Midway Road) and I-95 approximately 10 ½ miles west of St. Lucie Plant.	[PSL Annex – H.5] A Joint Information Center (JIC) is provided to allow the news media access to information from the Emergency Operations Facility. The JIC is co-located with the EOF (Midway Road/I-95 intersection). When activated during and event, the near-site JIC is staffed by site personnel. The near site JIC is designed to facilitate representatives from county, state and federal agencies, as well as members of	Editorial  No added, removed or altered commitments or change of intent.

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		the media.	
264.	Florida Power & Light Company, in cooperation with the State of Florida and the risk counties, conducts an annual program to acquaint the news media with the emergency plans, information concerning nuclear power and points of contact for release of public information in an emergency.	[CEP G.5] The news media will be provided materials to acquaint them with emergency planning effort at the NextEra specific site(s) annually. Typical content includes site information, information concerning radiation, emergency planning, and points of contact for release of information to the media during an emergency.	Editorial  No added, removed or altered commitments or change of intent.
265.	In the event of an emergency, representatives of the news media will be provided space in the Joint Information Center for work and interview purposes.	[CEP – H.5] When activated the JIC functions as a physical location for interacting with the media and for coordination between NextEra, federal and ORO PIOs regarding communications information to the public and the media.	Editorial  No added, removed or altered commitments or change of intent.
266.	4. Written Message for the Public Sample formats that may be used for release of information by FPL to the public via the news media appear in Tables 6-1 through 6-7. These releases include initial statements for each class of emergency and follow-up statements for the Alert class and higher.		Editorial Removed pre worded news releases, procedure level details which contain no actional items. No added, removed or altered commitments or change of intent.
267.	6.3 Rumor Control FPL will coordinate information exchange with State and County officials. This coordination will include awareness of media releases. The timely exchange of information among designated spokespersons will aid in dispelling most rumors. In written material which is disseminated annually to the public in the Plume Exposure Pathway EPZ, means for obtaining timely and accurate information is provided. Chapter 7, Section VI of the State Plan also discusses Rumor Control.	[CEP G.4]  NextEra personnel coordinate with ORO and federal PIOs via the JIS, or in a JIC when activated, to identify and address public inquiries and inaccurate information.  Public information personnel monitor media and public sources for misleading or erroneous information and to address inquiries. Rumors and misinformation are collected and provided to the appropriate individual or agency PIO. The PIOs assess and discuss the rumors and misinformation to coordinate responses.  ORO and federal PIOs address misinformation relating to offsite conditions, including protective action directives. NextEra spokespersons address misinformation regarding station/utility rumors.	Editorial  No added, removed or altered commitments or change of intent.

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		Rumors and incorrect information are addressed in media statements and at news conferences as appropriate.	
268.	FIGURE 6-1, PUBLIC INFORMATION INTERFACES		Editorial Removed procedure level details which contain no actional items. No added, removed or altered commitments or change of intent.
269.	TABLE 6-1, FPL PRESS STATEMENT TABLE 6-2, FPL PRESS STATEMENT TABLE 6-3, FPL PRESS STATEMENT TABLE 6-4, FPL PRESS STATEMENT TABLE 6-5, FPL PRESS STATEMENT TABLE 6-6, FPL PRESS STATEMENT TABLE 6-7, FPL PRESS STATEMENT		Removed procedure level details which contain no actional items.  No added, removed or altered commitments or change of intent.
	Section 7.0, Maintaining EP		
270.	7.1 Exercises and Drills  1. Definitions  An exercise is an event that tests the integrated capability of a major portion of the basic elements existing within the Radiological Emergency Plan for St. Lucie Plant. An exercise normally includes mobilization of State and local governmental personnel and resources adequate to verify the capability to respond to an accident scenario.  A drill is a supervised instruction period aimed at testing, developing, and maintaining skills in a particular operation. A drill is often a component of an exercise. A drill should be evaluated by the supervisory personnel conducting the drill.  2. Purpose  Periodic exercises and drills will be conducted in order to test the state of emergency preparedness of participating personnel, organizations, and agencies. Each exercise or drill will be conducted to:  1. Ensure that participants are familiar with their respective duties and responsibilities.	<ul> <li>[CEP N.1]</li> <li>1. Exercise: An exercise is an event that tests the integrated capability and a major portion of the elements of the emergency plans and organizations.</li> <li>• Over the period of the exercise cycle, exercises will test the adequacy of timing and content of implementing procedures and methods, test emergency equipment and communications networks, test the public alert and notification system, and ensure that emergency organization personnel are familiar with their duties.</li> <li>• Exercises must provide the opportunity for the ERO to demonstrate proficiency in the key skills necessary to implement the principal functional areas (see N.4) of emergency response.</li> <li>• State and local agencies within the plume exposure pathway EPZ are provided the opportunity to participate by invitation as</li> </ul>	Editorial  No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	2. Verify the adequacy of the Emergency Plan and Emergency Plan Implementing Procedures. 3. Test the communications network and systems. 4. Check the availability of emergency supplies and equipment. 5. Verify the operability of emergency equipment. The results of the exercises will form the basis for prescribing action to eliminate identified deficiencies.	described in Element N.2.a.  2. <u>Drill:</u> A drill is aimed at testing, developing and maintaining skills in one or more emergency plan functions.  • Drill types may be operational or discussion-based events (e.g., single ERF or tabletop drills). Drills may be a component of an exercise.  • During drills; activation of all of the ERFs is not required, supervised instruction is permitted, participants may be given the opportunity to resolve problems (success paths), and focus may be primarily on onsite training objectives. Drills may include evaluation of specific performance objectives or be conducted for non-evaluated training only.  The ERO (not necessarily each ERO member) shall be provided the opportunity to develop and maintain key emergency response skills within the scope of their duties in drills and exercises during each exercise cycle.  Over the course of an eight-year cycle all unique initiating conditions in the EAL scheme (with the exception of judgment ICs) are made available for the demonstration of event classification within drills or exercises.	onange Type
271.	3. Planning The site Emergency Preparedness Manager will be responsible for the planning, scheduling, and coordinating of exercises involving off-site agencies. A sample format for exercise scenarios appears in Table 7-1. All exercises and drills involving the plant are subject to the approval of plant management. When an exercise is to be conducted, the site Emergency Preparedness Manager, in conjunction with plant management, will:  1. Schedule a date for the exercise in coordination with the primary State and County	[CEP – P.3] The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations.	Non-RIE Title Change Removed procedure level details

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	emergency response agencies.  2. Obtain the approval of plant management.  3. Coordinate all FPL efforts with other participating personnel, organizations, and agencies.  4. Offer Federal, State, and local officials the opportunity to observe the exercise.  5. Assign personnel to prepare a scenario.  6. Assign personnel to assist in control and evaluation of the exercise.  7. Discuss and evaluate the exercise with observers and principal participants.  8. Ensure that for all identified deficiencies, corrective measures are recommended.  9. Prepare and submit documentation in accordance with plant procedures.  An Emergency Preparedness Coordinator may complete or coordinate completion of any of the above items. The site Emergency Preparedness Manager shall retain oversight and accountability through the requirements of EPIP-13, "Maintaining Emergency Preparedness - Emergency Exercises, Drills, Tests and Evaluations."		
272.	These exercises will simulate emergency conditions and may be scheduled such that two or more drills are conducted simultaneously. The site Emergency Preparedness Manager will normally notify the off-site emergency response organizations and agencies at least 30 days in advance of the scheduled date of an exercise.	[CEP – N.1]  1. Exercise: An exercise is an event that tests the integrated capability and a major portion of the elements of the emergency plans and organizations.  • Exercises must provide the opportunity for the ERO to demonstrate proficiency in the key skills necessary to implement the principal functional areas (see N.4) of emergency response.  [CEP – P.3]  The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations.	Editorial Title Change No added, removed or altered commitments or change of intent.
273.	7.1 4. Conduct of Exercises, Drills and Tests	[CEP – N.2.a] Each NextEra site will conduct a plume exposure	Editorial No added, removed or altered

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### # Current Emergency Plan

### **Common Emergency Plan and Site Annex**

### Change Type

Exercises (Integrated Drills) A radiological emergency response exercise will be conducted at least once every two calendar years to demonstrate the effectiveness of the Emergency Plan. Any exercise that will provide for coordination with and participation of off-site emergency response personnel, organizations, and agencies including those of Federal, State, and local governments will escalate to a Site Area Emergency or General Emergency. The exercise scenario will be varied from year to year such that all major elements of the Plan are tested at least every 8 years.

pathway exercise biennially. Specifically, the plume exposure pathway exercise is developed to provide the ERO with the opportunity to demonstrate proficiency in the principal functional areas of emergency response:

- Management and coordination of emergency response
- Accident assessment
- Event classification
- Notification of the OROs
- Assessment of the onsite and offsite impact of radiological release
- PAR development (required only in exercises that include a GE)
- Protective action decision-making (onsite protective actions)

commitments or change of intent.

- 274. The major elements that should be tested include the following:
  - Off hours staffing (6 P.M. 4 A.M.)
  - **Activation of Joint Information Center**
  - Use of fire control teams
  - Use of medical support personnel
  - Use of Security personnel for prompt access to emergency equipment or support
  - Use of one or more portions of backup communications for notification
  - Field monitoring
  - Capability for determining the magnitude and impact of the particular components of a release
  - Assembly and accountability
  - Initial recovery planning activities

Additionally, in each eight calendar year exercise cycle, the content of scenarios during drills and exercises must provide the opportunity for the ERO to demonstrate proficiency in the key skills necessary to respond to the following scenario

[CEP -- N.1.c]

Each NextEra site will conduct at least one off-hours drill or exercise within an eight-year exercise cycle. An off-hours drill or exercise is established as any time of day on a weekday holiday, or any time of day on a weekend day, or between the hours of 6:00 p.m. and 4:00 a.m. on a normal workday.

The off-hours drill requirement may be satisfied by an actual event provided it meets the above off-hours criteria and the objectives are evaluated and documented in a critique report for the augmentation of the ERO, the transfer of responsibilities, and facility activation.

[CEP -- N.2.a]

Each NextEra site will conduct a plume exposure pathway exercise biennially. Specifically, the plume exposure pathway exercise is developed to provide the ERO with the opportunity to demonstrate proficiency in the principal functional areas of emergency response:

Management and coordination of emergency

Non-RIE

Reworded to align with CEP. No added, removed or altered commitments or change of intent. The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654

R2 element and fleet description.

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## elements:

- hostile action directed at the plant site,
- no radiological release or an unplanned minimal radiological release that does not require public protective actions.
- an initial classification of or rapid escalation to a Site Area Emergency or General Emergency,
- implementation of strategies, procedures, and guidance developed under 10CFR50.54(hh)(2), and
- integration of offsite resources with onsite response.

# **Common Emergency Plan and Site Annex**

### response

- Accident assessment
- Event classification
- Notification of the OROs
- Assessment of the onsite and offsite impact of radiological release
- PAR development (required only in exercises that include a GE)
- Protective action decision-making (onsite protective actions)
- Plant system repair and mitigative action implementation

OROs will be invited to participate in plume exposure pathway exercises. If an ORO chooses not to participate, their participation is not required and it should be documented that they were given the opportunity to participate.

Biennial plume exposure pathway exercise scenarios are submitted to the NRC under 10 CFR 50.4 at least 60 days before they are held.

[CEP -- N.3.a]

Each NextEra site will conduct at least one HAB scenario in an exercise within an eight-year cycle.

The HAB scenario will include either a radiological release scenario or no/minimal radiological release scenario, but HAB scenarios combined with a no/minimal radiological release scenario will not be used in consecutive HAB exercises.

[CEP -- N.3.b]

Each NextEra site will conduct at least one rapid escalation scenario in an exercise within an eightyear cycle.

The rapid escalation scenario will begin with an initial declaration of, or rapid escalation to, the Site Area Emergency classification level while event response is performed from the Control Room.

[CEP -- N.3.c]

Each NextEra site will conduct at least one

### **Change Type**

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		no/minimal radiological release scenario that does not require PARs in an exercise within an eight-year cycle.	
		[CEP N.3.c.1]	
		OROs located within the plume exposure pathway EPZ are invited to participate in exercises with no/minimal radiological release scenarios.	
		NextEra will support offsite agencies in meeting FEMA demonstration requirements when they elect to not participate in a required no/minimal release scenario that is included in an exercise.	
		[CEP N.3.d]	
		Each NextEra site will conduct at least one scenario that integrates offsite resources provided by local support organizations with onsite response in an exercise within an eight-year cycle.	
		Demonstration of resource integration includes briefings, offsite response to the site, and coordination of worker protection, as appropriate to the scenario.	
		[CEP N.3.e]	
		Each NextEra site will conduct at least one demonstration of the ability to transition between procedures and select the best strategy for preventing or mitigating fuel damage and limiting radiological releases as required by 10 CFR 50.155(b)(1) or (2) within an eight-year cycle.	
		Methods to accomplish this demonstration are dependent upon the nature of the postulated initiating event, the plant response/accident sequence, and the ability of responders to select and implement mitigation/management strategies. These methods involve conducting any of the following:	
		<ul> <li>A demonstration of the transition from a controlling AOP or EOP into the Extensive Damage Mitigation Guidelines (EDMGs), FLEX support guidelines (FSGs), or Severe Accident Management Guidelines (SAMGs).</li> <li>A demonstration of the use of EDMGs.</li> </ul>	

275.  276.  277.  278.  279.  270.	#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
N.3.c.2 FEMA will determine whether a no/minimal radiological release scenario is acceptable for use in a full or partial participation biennial exercise.  N.2.B  No.RIE The CEP and Annexes are fromtated in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.  No.RIE NextEra will assist in development and participate as requested in an ingestion exposure pathway exercise to support FEMA evaluation of ORO emergency plan response activities in this area.  The scope, objectives and schedule will be coordinated with appropriate federal emergency organizations and OROs for exercises in which they participate.  (ICEP – N.1.a) Critiques of each drill and exercise will be held following each event to evaluate areas and identify issues. The critique is performed following the conclusion of a drill or exercise using preselected drill and exercise performance objectives Provisions are made for federal and ORO representatives to observe and participate in drill and exercise critiques when present.  A written report is prepared following a critique to document whether the objectives were successfully demonstrated.  A remedial exercise is only required if the emergency plan is not satisfactorily tested during the biennial exercise such that NRC, in consultation with FEMA, cannot (1) find reasonable assurance that adequate protective measures would be taken during a radiological emergency, or (2) determine that the ERO has maintained key skills specific to emergency response.			A demonstration of the use of FSGs.	
FEMA will determine whether a no/minimal radiological enlease scenario is acceptable for use in a full or partial participation biennial exercise.  The scope, objectives and schedule will be coordinated with appropriate federal emergency organizations and other evaluators, as appropriate, from Federal, State, and local agencies.  This emergency response exercise will be critiqued by Florida Power & Light Company controller/evaluators and other evaluators, as appropriate, from Federal, State, and local agencies.  The scope objectives and schedule will be coordinated with appropriate federal emergency organizations and OROs for exercises in which they participate.  CEP - N.1.al Citiques of each drill and exercise will be held following each event to evaluate areas and identify issues. The critique is performed following the conclusion of a drill or exercise using preselected drill and exercise performance objectives. Provisions are made for federal and ORO representatives to observe and participate in drill and exercise critiques when pressure for federal and ORO representatives to observe and participate in drill and exercise critique is performed following the exercise to detail of the NUREG-0654 R2 element and fleet description.  A rither expert is prepared following the exercise to detail of the NUREG-0654 R2 element and fleet description.  A remedial exercise is only required if the emergency plan is not satisfactorily tested during the biennial exercise such that NRC, in consultation with FEMA, cannot (1) find reasonable assurance that adequate protective measures would be taken during a radiological emergency, or (2) determine that the ERO has maintained key skills specific to emergency response.			A demonstration of the use of SAMGs.	
radiological release scenario is acceptable for use in a full or partial participation biennial exercise.  N.2.b  N.2.b  NextEra will assist in development and participate as requested in an ingestion exposure pathway exercise to support FEMA evaluation of ORO emergency plan response activities in this area.  The scope, objectives and schedule will be coordinated with appropriate federal emergency organizations and OROs for exercises in which they participate.  This emergency response exercise will be critiqued by Florida Power & Light Company controller/evaluators and other evaluators, as appropriate, from Federal, State, and local agencies.  Possible of each drill and exercise will be held following each event to evaluate areas and identify issues. The critique is performed following the conclusion of a drill or exercise using reselected drill and exercise performance objectives.  Provisions are made for federal and ORO representatives to observe and participate in drill and exercise critiques when present.  A writter report is prepared following a critique to document whether the objectives were successfully demonstrated.  A remedial exercise is only required if the emergency plan is not satisfactorily tested during the biennial exercise such that NRC, in consultion with FEMA, cannot (1) find reasonable assurance that adequate protective measures would be taken during a radiological emergency, or (2) determine that the ERO has maintained key skills specific to emergency	275.		N.3.c.2	Non-RIE
NextEra will assist in development and participate as requested in an ingestion exposure pathway exercise to support FEMA evaluation of ORO emergency plan response activities in this area.  The scope, objectives and schedule will be coordinated with appropriate federal emergency organizations and OROs for exercises in which they participate.  This emergency response exercise will be critiqued by Florida Power & Light Company controller/evaluators and other evaluators, as appropriate, from Federal, State, and local agencies.  This emergency response exercise will be critiqued by Florida Power & Light Company controller/evaluators and other evaluators, as appropriate, from Federal, State, and local agencies.  This emergency response exercise will be critiqued by Florida Power & Light Company controller/evaluators and other evaluators, as appropriate, from Federal, State, and local agencies.  This emergency response exercise will be critiqued by Florida Power & Light Company controller/evaluators and other evaluators, as appropriate, from Federal, State, and local agencies.  The scope, objectives are and schedule will be critique of detail of the NUREG-0654 R2 element and fleet description.  Non-RIE  Reworded to align with CEP. No added, removed or altered commitments or change of intent. The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.  A written report is prepared following a critique to document whether the objectives were successfully demonstrated.  A remedial exercise is only required if the emergency plan is not satisfactorily tested during the biennial exercise such that NRC, in consultation with FEMA, cannot (1) find reasonable assurance that adequate protective measures would be taken during a radiological emergency, or (2) determine that the ERO has maintained key skills specific to emergency response.			radiological release scenario is acceptable for use in	formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654
requested in an ingestion exposure pathway exercise to support FEMA evaluation of ORO emergency plan response activities in this area.  The scope, objectives and schedule will be coordinated with appropriate federal emergency organizations and OROs for exercises in which they participate.  This emergency response exercise will be critiqued by Florida Power & Light Company controller/evaluators and other evaluators, as appropriate, from Federal, State, and local agencies.  [CEP – N.1.a] Critiques of each drill and exercise will be held following each event to evaluate areas and identify issues. The critique is performed following the conclusion of a drill or exercise using preselected drill and exercise performance objectives.  Provisions are made for federal and ORO representatives to observe and participate in drill and exercise critiques when present.  A written report is prepared following a critique to document whether the objectives were successfully demonstrated.  A remedial exercise is only required if the emergency plan is not satisfactorily tested during the biennial exercise such that NRC, in consultation with FEMA, cannot (1) find reasonable assurance that adequate protective measures would be taken during a radiological emergency, or (2) determine that the ERO has maintained key skills specific to emergency response.	276.		N.2.b	Non-RIE
by Florida Power & Light Company controller/evaluators and other evaluators, as appropriate, from Federal, State, and local agencies.  Critiques of each drill and exercise will be held following each event to evaluate areas and identify issues. The critique is performed following the conclusion of a drill or exercise using preselected drill and exercise performance objectives.  Provisions are made for federal and ORO representatives to observe and participate in drill and exercise critiques when present.  A written report is prepared following a critique to document whether the objectives were successfully demonstrated.  A remedial exercise is only required if the emergency plan is not satisfactorily tested during the biennial exercise such that NRC, in consultation with FEMA, cannot (1) find reasonable assurance that adequate protective measures would be taken during a radiological emergency, or (2) determine that the ERO has maintained key skills specific to emergency response.			requested in an ingestion exposure pathway exercise to support FEMA evaluation of ORO emergency plan response activities in this area.  The scope, objectives and schedule will be coordinated with appropriate federal emergency organizations and OROs for exercises in which they	formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654
	277.	by Florida Power & Light Company controller/evaluators and other evaluators, as	Critiques of each drill and exercise will be held following each event to evaluate areas and identify issues. The critique is performed following the conclusion of a drill or exercise using preselected drill and exercise performance objectives.  Provisions are made for federal and ORO representatives to observe and participate in drill and exercise critiques when present.  A written report is prepared following a critique to document whether the objectives were successfully demonstrated.  A remedial exercise is only required if the emergency plan is not satisfactorily tested during the biennial exercise such that NRC, in consultation with FEMA, cannot (1) find reasonable assurance that adequate protective measures would be taken during a radiological emergency, or (2) determine that the ERO has maintained key skills specific to emergency	Reworded to align with CEP.  No added, removed or altered commitments or change of intent.  The CEP and Annexes are formatted in a 50.47(b) outline.  Wording altered to address the level of detail of the NUREG-0654
	278.	During the interval between biennial exercises,		Non-RIE

# Current Emergency Plan **Common Emergency Plan and Site Annex** Change Type adequate emergency response capabilities will be 2. Drill: A drill is aimed at testing, developing and Wording altered to address the maintained by conducting drills, including at least one maintaining skills in one or more emergency plan level of detail of the NUREG-0654 drill involving a combination of some of the principal R2 element and fleet description. functions. functional areas of emergency response capabilities. Drill types may be operational or discussion-Wording removed describing RP The principal functional areas of emergency response based events (e.g., single ERF or tabletop drills). drills requirements that are include activities such as management and Drills may be a component of an exercise. governed under separate program coordination of emergency response, accident requirements. During drills; activation of all of the ERFs is not assessment, protective action decision-making, and required, supervised instruction is permitted, plant system repair and corrective actions. participants may be given the opportunity to During this off-year drill, activation of all of the resolve problems (success paths), and focus may emergency response facilities (TSC, OSC, EOF) be primarily on onsite training objectives. Drills would not be necessary, there would be an may include evaluation of specific performance opportunity to consider accident management objectives or be conducted for non-evaluated strategies, supervised instruction would be permitted, training only. operating staff would have the opportunity to resolve problems (success paths) rather than have controllers intervene, and the drills could focus on on-site training objectives. Radiological Monitoring Drill N.4.d Non-RIE 279. A radiological monitoring drill will be conducted at Reworded to align with CEP. Each NextEra site will conduct an environmental least once every calendar year. These drills will monitoring drill once per calendar year. No added, removed or altered include collection and analysis of sample media (i.e. The scope of the environmental monitoring drill will commitments or change of intent. air). As an integral part of this annual drill, include performance objectives for direct radiation The CEP and Annexes are communications and the understanding of messages measurements in the environment, collection and formatted in a 50.47(b) outline. between the off-site monitoring team(s) and the TSC analysis of sample media (e.g., water, vegetation, Wording altered to address the RP Supervisor will be tested. Radiation Protection soil, and air), communications, and record keeping. level of detail of the NUREG-0654 Department personnel will participate in health R2 element and fleet description. physics drills semi-annually and one of the semiannual drills may be incorporated into the radiological monitoring drill. As indicated in Chapter 14, Section III of the State Plan, off-site radiological monitoring drills will be conducted and these drills will involve the collection of sample media. 7.4.1.3. Medical Emergency Drill [CEP -- N.4.a] Potential RIE 6-1 A medical emergency drill involving a simulated Each NextEra site will conduct an onsite simulated Refer to assessment Section 2.1 for contaminated individual, with provisions for activation medical drill once per calendar year. the disposition of this item. of the plant First Aid Team will be conducted at least The scope of the emergency medical drill will include once every calendar year. Participation by local a simulated on-site injured and contaminated support services (i.e., ambulance and off-site medical

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	treatment facility) will be tested separately once per year or as part of the annual medical drill.	individual and medical/ first aid treatment, including contamination control.  Emergency Medical Drill offsite participation and periodicity for support Hospital and Ambulance services are performed in accordance with the 42 CFR 482.15 regulations and are not included in the scope of the station medical drills.		
281.	4. Hostile Action Based (HAB) Drills/Exercises Hostile Action Based drills will be conducted to support the exercise (Integrated Drill) schedule.	[CEP N.3.a] Each NextEra site will conduct at least one HAB scenario in an exercise within an eight-year cycle. The HAB scenario will include either a radiological release scenario or no/minimal radiological release scenario, but HAB scenarios combined with a no/minimal radiological release scenario will not be used in consecutive HAB exercises.		Editorial No added, removed or altered commitments or change of intent.
282.	5. Fire Emergency Drill Fire drills are conducted in accordance with 10 CFR 50, Appendix R, III.I.3. The Fire Protection Program is described in greater detail in plant administrative procedures.			Non-RIE  Removed wording regarding fire drills. Content not applicable to a NUREG-0654 R2 licensee related element.  Fire drills are governed under a separate regulatory program.
283.	6. Communications Tests and Drills Communications with State and local governments within the Plume Exposure Pathway Emergency Planning Zone (EPZ) will be tested monthly. Communications with the NRC via the Emergency Notification System (ENS) will be tested monthly. On an annual basis, communications to the State EOC, St. Lucie and Martin County EOCs will be tested. As	[CEP – F.3]  Communication systems testing is accomplished in accordance with Table F-1.  Table F-1: Communication System Testing Requirements  Communication Testing Requirement System		Non-RIE Reworded to align with CEP. No added, removed or altered commitments or change of intent. The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the
	part of the annual test certain information will be exchanged. It will be determined whether or not the	ORO Notification System	Monthly <sup>(a)</sup>	level of detail of the NUREG-0654 R2 element and fleet description.
	content of the drill messages was understood. The annual drill may be performed as part of an exercise.	NRC FTS (ENS) Network	Monthly (b)	
	As indicated in Chapter 14, Section III of the State Plan, the State conducts communications drills at least annually. These drills include "communications	ERDS	Verify Transmission Quarterly	
	between the nuclear power plants, State, and local emergency operation centers and field assessment	ERO Notification System	Per Elements N.4.h and N.4.i	

#	Current Emergency Plan	Common Emergency P	Plan and Site Annex	Change Type
	teams". Chapter 6 of the State Plan indicates the equipment tested during drills.	Field Monitoring Teams Communication	Annually <sup>(a)</sup>	
		Telephone System	Frequent Use (c)	
		Station Radio System	Frequent Use (c)	
		Station PA System	Frequent Use (c)	
		ANS	per site specific ANS Design Report	
		(a) Test credit may be g drill.	iven by successful use in a	
		TSC and EOF requir	, ,	
		testing frequency of the associated equip	ems that are listed with a "Frequent Use" indicate that ment is normally used at a crity, such that separate not needed.N.4.f	
		Each NextEra site will co once per calendar year.	onduct communications drills	
		Communications tests de be performed as drills pr	escribed in Element F.3 can ovided they include the the content of messages	
284.		[CEP N.4.g]		Non-RIE
		Drill requirements.	the Post-Accident Sampling	Text added to align with CEP and to address applicability of PASS drill requirements to PSL.
		for the elimination of pos (PASS) requirements fro accordance with their site evaluation, contingency of for obtaining and analyzi samples; however, these have to be carried out in exercises.	plans have been developed ng highly radioactive e contingency plans do not emergency plan drills or	No added, removed or altered commitments or change of intent. The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.
		Refer to element I.4.a for elimination safety evalua		

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
285.	7. Unannounced Drills	[CEP N.1.d]	Potential RIE 6-2
203.	At least one communications drill per year will be unannounced. This unannounced drill will include notification to all primary off-site response agencies (i.e. DEM, Department of Health, County Departments of Public Safety) and those FPL emergency response personnel required to be notified based upon the drill scenario. The unannounced communication drill could coincide with an exercise, or an actual Emergency Plan activation.	Each NextEra site will conduct at least one unannounced drill or exercise within an eight-year cycle.  The unannounced drill requirement may be satisfied by an actual event provided objectives are evaluated and documented in a critique report for the augmentation of the ERO, the transfer of responsibilities, and facility activation.  [CEP N.4.h]  Each NextEra site will conduct an off-hours unannounced ERO report-in drill at least once within	Refer to assessment Section 2.2 for the disposition of this item.
		an eight-year cycle.  The scope of the off-hours unannounced ERO reportin drill will require actual response to the assigned facility.  The Off-Hours Report-In Drill requirement may be satisfied by an actual event provided objectives are evaluated and documented in a critique report.  [CEP N.4.i]  The NextEra ERO notification is an all-call process. Each NextEra site will conduct an off-hours unannounced ERO call-in drill biennially to verify each minimum staffing ERO position meets the required Table B-1 response time.	
		The scope of the off-hours unannounced ERO call-in drill will require collection of the ERO notification system report which documents response within the required time.  Completion of an Element N.4.h off-hours unannounced ERO report-in drill satisfies the requirements of the off-hours unannounced ERO call-in drill in this element.  The Off-Hours Call-In Drill requirement may be satisfied by an actual event provided the objectives are evaluated and documented in a critique report.	
286.		[CEP N.4.i]	Non-RIE
		Each NextEra site will conduct a protective action drill	Added commitment for drill to meet

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		within an eight-year cycle.  The scope of the protective action drill will demonstrate the ability to implement and coordinate protective actions for onsite personnel during a hostile action using one or more of the following:	NUREG 0654, R2 Element
		<ul> <li>Warning personnel in the OCA outside the protected area</li> </ul>	
		<ul> <li>Evacuation of personnel from target buildings, including security personnel</li> </ul>	
		<ul> <li>Site evacuation by opening (while continuing to defend) security gates (demonstrated through discussion/table-top)</li> </ul>	
		Dispersal of licensed operators	
		<ul> <li>Sheltering of personnel in structures away from potential site targets</li> </ul>	
		<ul> <li>Arrangements for accounting for personnel after the attack</li> </ul>	
287.		[CEP N.4.k]Each NextEra site will conduct an aircraft threat/attack response drill at least once within an eight-year cycle.	Non-RIE Added commitment for drill to meet NUREG 0654, R2 Element
		This drill may be combined with the beyond design basis demonstration in Element N.3.e.	
288.		[CEP N.4.I]	Non-RIE
		Each NextEra site will conduct a minimum staffing	Added commitment for drill to meet
		drill at least once within an eight-year cycle.  A minimum staffing response drill requires facility	NUREG 0654, R2 Element
		activation, full transfer of responsibilities from the	
		Control Room, and demonstration of event assessment and response activities.	
289.		[CEP N.4.m]	Non-RIE
		Each NextEra site will conduct an ERO on-shift	Added commitment for drill to meet
		response drill at least once within an eight-year cycle.	NUREG 0654, R2 Element
		An on-shift response drill requires demonstration of classification, notification and PAR functions with	
		minimum shift staffing (no support from augmenting	
		ERO personnel no sooner than 90 minutes after	
		event declaration) using an Onshift Staffing Analysis	

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		event modified to support the objectives.	
290.	7.1 5. Evaluation During a drill or an exercise, controllers may take measures in response to actions taken by the participants that might affect the planned outcome (objective of the drill or exercise). Minor errors in procedures, techniques or inappropriate prompting by controllers will be noted and discussed during the post-drill/exercise evaluation. Following an exercise, the site Emergency Preparedness Manager, plant management, FPL controller/evaluators, and principal participants in the exercise will discuss and evaluate the exercise. Drill evaluations will also be conducted, though personnel involvement may be different. The evaluation should be based on the ability of participants to follow emergency procedures, the adequacy of emergency procedures, and the adequacy of emergency equipment and supplies. Plant management and staff will be responsible for recommending necessary changes in the Emergency Plan and/or Emergency Plan Implementing Procedures (EPIPs) to the site Emergency Preparedness Manager.	[CEP – N.1.a] Critiques of each drill and exercise will be held following each event to evaluate areas and identify issues. The critique is performed following the conclusion of a drill or exercise using preselected drill and exercise performance objectives. Provisions are made for federal and ORO representatives to observe and participate in drill and exercise critiques when present. A written report is prepared following a critique to document whether the objectives were successfully demonstrated. [CEP N.1.b] Failed performance objectives and other programmatic weaknesses are entered into the corrective action program (CAP). [CEP P.11] The NextEra corrective action program is used to capture all events that do not meet program regulations, requirements, standards, or are otherwise conditions adverse to quality.	Editorial  No added, removed or altered commitments or change of intent.
291.	The site Emergency Preparedness Manager or designee in Emergency Preparedness, is responsible for making changes to the Emergency Plan and/or EPIPs.	[CEP – P.3] The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations. [CEP – P.4] The formal emergency plan (as defined in the introduction section) and the emergency plan implementing procedures (as defined in Section P.7) will be reviewed on an annual basis and updated if necessary. Any changes to regulations, issues identified by drills and exercises, assessments and audits, or other updates will be evaluated and incorporated into the emergency plan if warranted.	Editorial  No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		Letters of Agreement will be reviewed and verified on an annual basis, and updated if warranted.  Changes will be processed in accordance with 10 CFR 50.54(q) requirements and NextEra document control/records management procedures.	
292.	<ol> <li>7.2 Emergency Response Training</li> <li>1. Objectives</li> <li>The primary objectives of emergency response training are as follows:</li> <li>1. Familiarize appropriate individuals with the Emergency Plan and related Emergency Plan Implementing Procedures (EPIPs).</li> <li>2. Instruct individuals in their specific duties to ensure effective and expeditious action during an emergency.</li> <li>3. Periodically present significant changes in the scope or content of the Emergency Plan.</li> <li>4. Provide refresher training to ensure that personnel are familiar with their duties and responsibilities.</li> <li>5. Provide the various emergency organization groups with the required training that will ensure an integrated and prompt response to an emergency situation.</li> </ol>	[CEP – O.1] Initial training and continuing ERO training is conducted to ensure ERO personnel are properly qualified to their specific position.	Non-RIE Removed specific list of objectives that is included in procedures. No added, removed or altered commitments or change of intent.
293.	7.2.2. Training of On-site Emergency Response Organization (ERO) Personnel Training programs have been established for personnel working at the plant site. The programs include initial indoctrination and subsequent retraining.  The training program for members of the on-site ERO will include practical drills, in which each individual participating in the drill demonstrates an ability to perform assigned emergency functions. Participation in a drill or exercise is not required for initial training qualification in the ERO. Training requirements are delineated in EPIP-12, "Maintaining Emergency Preparedness - Radiological Emergency Plan	CEP – O.1] Initial training and continuing ERO training is conducted to ensure ERO personnel are properly qualified to their specific position. [CEP O.2] The ERO training program is developed and evaluated based on position-specific responsibilities/tasks using Systems Approach to Training (SAT) principles, when applicable.	Editorial  No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Training."		
294.	[7.2.2. Training of On-site Emergency Response Organization (ERO) Personnel]  The Site Training Manager is responsible for the conduct and documentation of initial training and annual retraining programs for on-site FPL Emergency Response Organization (ERO) personnel. Specific training is specified in the following subsections. The site.  Emergency Preparedness Manager is responsible for the content and accuracy of the Emergency Plan Training. Each new employee permanently assigned to work at the St. Lucie Plant shall be given initial orientation training. For employees not assigned specific responsibility or authority under the Emergency Plan or Emergency Plan Implementing Procedures (EPIPs), such training shall, at a minimum, provide information describing the action to be taken by an individual discovering an emergency condition, the location of assembly areas, the identification of emergency alarms, and the action to be taken upon hearing those alarms.  Training must be current to be maintained in the Emergency Response Organization (ERO).  Emergency Plan Training records for Security personnel are maintained by the Site Training Manager.	All individuals participating in the ERO training program are given the opportunity to provide feedback of training sessions. Any weak or deficient areas identified and corrected.  [CEP – P.3]  The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations.	Potential RIE 6-3 Refer to assessment Section 2.3 for the disposition of this item.
295.	<ul> <li>The following provides a description of the training provided to personnel filling the indicated positions.</li> <li>1. Emergency Coordinator</li> <li>a. Interpretation of plant and field data and how it relates to emergencies and their classification (i.e. Emergency Action Level (EAL) determination per Chapter 3).</li> <li>b. Prompt and effective notification methods, including the types of communication systems.</li> <li>c. Method of activating the Florida Power &amp; Light Company Emergency Response Organization (ERO).</li> </ul>	<ul> <li>[CEP – O.1]</li> <li>Initial training and continuing ERO training is conducted to ensure ERO personnel are properly qualified to their specific position. Categories of personnel requiring training include:</li> <li>1. Emergency Directors (includes the aspect of classification, notification and PARs)</li> <li>2. Accident Assessment</li> </ul>	Editorial No added, removed or altered commitments or change of intent.

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#	Cur	rent Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	d.	The methods used for estimating radiation doses and recommending off-site protective actions.		
	e.	Emergency Plan familiarization.		
	f.	Emergency Plan Implementing Procedures (EPIPs) familiarization.		
	g.	Communications and record-keeping methods.		
	h.	Accident assessment and corrective action (licensed operators only).		
296.	2.	Shift Technical Advisor	[CEP - 0.1]	Non-RIE
	a.	Emergency Plan familiarization	Initial training and continuing ERO training is	STAs receive training per the
	b.	Emergency Plan Implementing Procedures (EPIPs) familiarization.	conducted to ensure ERO personnel are properly qualified to their specific position.	Operations Training Program No added, removed or altered
	C.	Technical Specifications (in-depth understanding)	Categories of personnel requiring training include: 2. Accident Assessment	commitments or change of intent.
	d.	Specialized training in power plant and reactor specific core operating characteristics (normal and abnormal)		
		Familiarization with other related plant grams, plans, and procedures with emphasis on dent assessment techniques.		
297.	7.2.	2.3. Technical Support Center On-site Staff	[CEP - 0.1]	Non-RIE
	a.	Emergency Plan familiarization	Initial training and continuing ERO training is	Wording revised to align with CEP.
	b.	Emergency Plan Implementing Procedures (EPIPs) familiarization.	conducted to ensure ERO personnel are properly qualified to their specific position.	No added, removed or altered commitments or change of intent.
	C.	Communications and record-keeping methods	Categories of personnel requiring training include:	
	d.	Training for the various technical personnel that	Accident Assessment	
		make up the TSC staff with emphasis on	Radiation Protection and Monitoring	
	,	accident assessment and corrective action.	ERO RPT position is qualified to ANSI technician standards.	
	4. 1.	Other Emergency Responders Radiation Protection Personnel	b. ERO RP Qualified Individual position is task	
	а.	Use of air sampling equipment	qualified to perform the following:	
	b.	Performance of radiation/contamination surveys	Provide RP coverage for accessing known	
	C.	Determination of air activity levels, and stay times based on DAC hours	radiological environments (which includes respirator qualifications)	
	d.	Determination of radiation levels.	<ul> <li>Control dosimetry and RCA access</li> </ul>	
	e.	Emergency Plan familiarization through RP Emergency Procedures	Provide in-plant surveys	

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# Current Emergency Plan **Common Emergency Plan and Site Annex Change Type** Record-keeping methods In-depth knowledge of personnel and field g. monitoring/analyzing techniques Communications and coordination [CEP - 0.1] 298. 2. Security Personnel Non-RIE Emergency Plan familiarization through the Categories of personnel requiring training include: Wording revised to align with CEP. Emergency Plan Implementing Procedures. No added, removed or altered b. Personnel accountability procedures a. Security personnel receive emergency plan commitments or change of intent. Site ingress and egress control procedures training as part of their normal job specific C. d. Deployment of Security Personnel training. b. Security personnel assigned a specific ERO Communications and coordination e. position receive training on emergency plan related tasks. 7.2 2. 4 First Aid Team [CEP - 0.1] Non-RIE 299. Emergency Plan familiarization through Categories of personnel requiring training include: Wording revised to align with CEP. **Emergency Plan Implementing Procedures** First Aid - Personnel assigned as first aid Training of First Aid Team familiarization responders maintain qualifications equivalent to Red controlled by Industrial Safety Communications and coordination Cross Standard First Aid techniques. b. Receive EP familiarization training Description, storage location, and application of as part of General Employee C. supplies and equipment Training for site access. Sequential steps for the assessment of contamination levels and treatment of personnel injury Familiarization with personnel decontamination e. procedures Procedures for the evacuation of contaminated persons to off-site medical facilities Team members will satisfactorily complete the first aid portion of the American National Red Cross Standard (ANRCS) First Aid Course or equivalent and will re-qualify every three years. Regualification does not require completion of the CPR portion of the ANRCS course. 300. 3. Training of FPL EOF Emergency Response [CEP - P.3] **Editorial** Organization Personnel The site Regulatory Affairs Managers are responsible Title Change for the development, maintenance, review, and The Site Training Manager is responsible for the No added, removed or altered conduct and documentation of initial training and updating of the emergency plan, as well as the commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	annual retraining for FPL EOF Emergency Response Organization personnel.	coordination of the plan with other response organizations	
301.	<ol> <li>Recovery Manager</li> <li>Prompt and effective notification methods, including the types of communication systems.</li> <li>Method of activating the Florida Power &amp; Light Company off-site Emergency Response Organization.</li> <li>The methods used for estimating radiation doses and determining Protective Action Recommendations (PARs).</li> <li>Emergency Plan familiarization.</li> <li>Emergency Plan Implementing Procedures (EPIPs) familiarization.</li> <li>Familiarization with the Emergency Operations Facility and the Technical Support Center.</li> </ol>	[CEP – O.1] Initial training and continuing ERO training is conducted to ensure ERO personnel are properly qualified to their specific position. Categories of personnel requiring training include:  1. Emergency Directors (includes the aspect of classification, notification and PARs)	Editorial  No added, removed or altered commitments or change of intent.
302.	7.2 3. Training of FPL EOF Emergency Response Organization Personnel (continued) 2. JIC Manager, Emergency Security Manager, Emergency Technical Manager a. Emergency Plan familiarization b. Emergency Plan Implementing Procedures (EPIPs) familiarization 4. Training of Non-FPL Off-site Emergency Response Personnel	[CEP – O.1] Initial training and continuing ERO training is conducted to ensure ERO personnel are properly qualified to their specific position.	Editorial  No added, removed or altered commitments or change of intent.
303.	Off-site agencies who may be called upon to provide assistance in the event of an emergency shall be offered briefings annually. These briefings will discuss basic concepts in radiation protection, plant operations and security, emergency classification, protective action recommendations and emergency response as appropriate. The following groups will be offered these sessions:  A. Fire and rescue  B. Police  C. Medical Support  D. Principal decision makers for State and	[CEP – O.1.a]  NextEra offers emergency response training annually to local support organizations. Training includes basic radiation protection, the notification process for their organization, and their organization's expected role. The offered training for local support organizations who will enter the site also includes the general site layout, site access procedures, and the identity (by position and title) of the onsite individual who will control their support activities.  [CEP – D.1.b]  The current EAL scheme is reviewed with the sites'	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Section purpose descriptions replaced with planning standard wording.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	county emergency response agencies  1. Police and Fire Fighting Support As indicated in Chapter 15, Figure 15-1 to the State Plan, police and fire fighting personnel will receive training and retraining. Chapter 15 describes the details of training.	respective OROs on an annual basis.	
304.	2. Local Emergency Management Officials As described in Chapter 15 of the State Plan, disaster preparedness personnel will receive training and retraining.		Non-RIE Removed information from State Plan from CEP
305.	3. Emergency Action Levels (EALs) Review On an annual basis, the Emergency Action Levels (EALs) shall be reviewed with State and local governmental authorities.	[CEP – D.1.b] The NRC approved NextEra EAL schemes have been agreed to by the OROs associated with the site. The current EAL scheme is reviewed with the sites' respective OROs on an annual basis.	Editorial  No added, removed or altered commitments or change of intent.
306.	7.3 Planning Effort Development Overall authority and responsibility for radiological emergency preparedness and planning lies with the Chief Nuclear Officer. As described below, through his/her staff (at the Plant and at Jupiter West), the FPL emergency planning and preparedness program is implemented. Major responsibility in this area has been delegated to the site Emergency Preparedness Manager and has been described throughout this plan.	[CEP P.2] The Chief Nuclear Officer has the overall authority and responsibility for the NextEra Common Emergency Plan.	Editorial  No added, removed or altered commitments or change of intent.
307.	Emergency Plan Implementing Procedures (EPIPs)  Written procedures will be established, implemented, and maintained covering the activities associated with Emergency Plan implementation.	[CEP P.7] Table P.7-1 provides a listing, by title, of the common response and maintenance procedures required to implement the emergency plan, and the section(s) of the emergency plan to be implemented by each procedure.  A listing, by title, of the site-specific response and maintenance procedures required to implement the emergency plan is provided in the site annexes.	Editorial  No added, removed or altered commitments or change of intent.
308.	Review of the Emergency Plan and Emergency Plan Implementing Procedures	[CEP P.3] The site Regulatory Affairs Managers are responsible	Potential RIE 6-4 Refer to assessment Section 2.4 for

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	The Emergency Plan and Emergency Plan Implementing Procedures will be under continuing review by the site emergency planning group. A comprehensive review of the Emergency Plan will be conducted annually. The Emergency Plan Implementing Procedures are reviewed during drills, exercises, and actual emergencies and revised as necessary to correct identified deficiencies. The Emergency Plan Implementing Procedures will undergo a thorough formal review at least once every two years and be revised as necessary. Notification lists and rosters will be updated at least quarterly. If changes affecting emergency response are identified, these changes will be made as needed. The revised Emergency Plan will be distributed with the latest revision number indicated on each page. Revision indication along the right margin will be used to indicate where changes have been made. If during these annual reviews no changes are needed, this will be documented.	for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations.  [CEP P.4]  The formal emergency plan (as defined in the introduction section) and the emergency plan implementing procedures (as defined in Section P.7) will be reviewed on an annual basis and updated if necessary. Any changes to regulations, issues identified by drills and exercises, assessments and audits, or other updates will be evaluated and incorporated into the emergency plan if warranted. Letters of Agreement will be reviewed and verified on an annual basis, and updated if warranted.  Changes will be processed in accordance with 10 CFR 50.54(q) requirements and NextEra document control/records management procedures.	the disposition of this item.
309.	Changes to the Emergency Plan will be submitted, in writing or with pages marked for revision, to the site Emergency Preparedness Manager, or designee, in Emergency Preparedness. All proposed changes to the Emergency Plan shall be reviewed by the On-site Review Group (ORG) and, prior to implementation, approved by the Site Vice President - St. Lucie Plant, the senior executive responsible for the safe operation of the plant. Revisions to the Emergency Plan will be sent to the Corporate Functional Area Manager (CFAM).  The effective date of the revised Emergency Plan is determined by the site Emergency Preparedness Manager based on the Station work schedule and pre-implementation training, coordinated implementation with other documents and other appropriate considerations. The effective date should not exceed the approval date by more than thirty days.  Changes to the EPIPs are performed in accordance	[CEP P.4] The formal emergency plan (as defined in the introduction section) and the emergency plan implementing procedures (as defined in Section P.7) will be reviewed on an annual basis and updated if necessary. Any changes to regulations, issues identified by drills and exercises, assessments and audits, or other updates will be evaluated and incorporated into the emergency plan if warranted. Letters of Agreement will be reviewed and verified on an annual basis, and updated if warranted. Changes will be processed in accordance with 10 CFR 50.54(q) requirements and NextEra document control/records management procedures. [CEP P.12] Changes in plant configuration are evaluated for their impact on the effectiveness of the emergency plan through the plant modification or license compliance review processes specified in change procedures and, if required, the 10 CFR 50.54(q) change	Editorial  No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	with plant procedures. EPIPs are approved by the site Emergency Preparedness Manager unless changes are identified for evaluation by the On-site Review Group (ORG) with approval recommended to the Site Vice President.	evaluation process	
310.	Document holders will receive revisions to the Emergency Plan as they are issued. The site Emergency Preparedness Manager is responsible for coordinating the periodic reviews of the Emergency Plan. The site Emergency Preparedness Manager will ensure that elements of the emergency organization (FPL, State, local, Federal) are informed of changes to the Emergency Plan.	[CEP P.5] Revised copies of the emergency plan are posted and distributed in accordance with NextEra records management system procedures. Changes to the emergency plan are submitted to the NRC in accordance with 10 CFR 50.4.	Editorial  No added, removed or altered commitments or change of intent.
311.	The site Emergency Preparedness Manager is responsible for maintaining emergency preparedness. He/she maintains a roster of the Emergency Response Organization participants and their alternates.	[CEP – P.3] The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations. CEP P.10] The NextEra emergency communications directory contains select contact numbers for ORO and support organizations identified in the emergency plan and implementing procedures. The ERO call-out system contains comprehensive ERO contact information.	Editorial Title Changes No added, removed or altered commitments or change of intent.
312.	This roster is reviewed and confirmed periodically, typically once each calendar quarter. Each participant is responsible for advising the site Emergency Preparedness Manager when his/her duties are changed such that he/she can no longer participate. In the event of transfer or termination, the site Emergency Preparedness Manager should be notified by the employee's department head, and a replacement named and trained.	[CEP P.10]  NextEra ERO contact information is verified semi- annually and updated as needed.  Facility and support contact information in the emergency communications directory is verified annually and updated as needed.	Editorial Title Changes No added, removed or altered commitments or change of intent.
313.	Responsibility for day-to-day emergency planning coordination lies with the site Emergency Preparedness Manager.	[CEP – P.2] The Chief Nuclear Officer has the overall authority and responsibility for the NextEra Common Emergency Plan.	Editorial Title Changes Wording altered to address the level of detail of the NUREG-0654

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		[CEP – P.3] The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations.	R2 element and fleet description. No added, removed or altered commitments or change of intent.
314.	3. Review of Changes with On-site Personnel The Site Training Manager will ensure that on-site Emergency Response Organization personnel are informed of relevant changes in the Emergency Plan and Emergency Plan Implementing Procedures.	[CEP P.4] The formal emergency plan (as defined in the introduction section) and the emergency plan implementing procedures (as defined in Section P.7) will be reviewed on an annual basis and updated if necessary. Any changes to regulations, issues identified by drills and exercises, assessments and audits, or other updates will be evaluated and incorporated into the emergency plan if warranted. Letters of Agreement will be reviewed and verified on an annual basis, and updated if warranted.  Changes will be processed in accordance with 10 CFR 50.54(q) requirements and NextEra document control/records management procedures.	Editorial Title Changes No added, removed or altered commitments or change of intent.
315.	4. Review of Changes with Off-site Personnel Periodic correspondence and/or meetings will be held to inform off-site FPL emergency support personnel of changes in the Emergency Plan and Emergency Plan Implementing Procedures.	CEP – A.1.a]  3. Offsite Response Organizations  The NextEra ERO coordinates response actions with OROs. Interface between the site and the OROs is governed by their respective emergency plans, which are developed and maintained in coordination with the NextEra emergency plan. OROs are described in the site annexes.  [CEP – D.1.b]  The current EAL scheme is reviewed with the sites' respective OROs on an annual basis.  [CEP – P.4]  The formal emergency plan (as defined in the introduction section) and the emergency plan implementing procedures (as defined in Section P.7) will be reviewed on an annual basis and updated if necessary. Any changes to regulations, issues identified by drills and exercises, assessments and audits, or other updates will be evaluated and	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		incorporated into the emergency plan if warranted. Letters of Agreement will be reviewed and verified on an annual basis, and updated if warranted.	
316.		[CEP P.6] Refer to Introduction Section for a listing of emergency plan extension documents (documents that are considered part of the emergency plan but are maintained separately).	Non-RIE Wording added to align with CEP.
		Emergency plans developed by other agencies that support the NextEra Common Emergency Plan include the following:  Department of Homeland Security National	
		Response Framework  U.S. Nuclear Regulatory Commission Incident Response Plan	
		Plans for organizations that support individual sites are listed in the site annexes.  [PSL Annex P.6]	
		External emergency plans specific to the support of PSL include the following:	
		<ul> <li>Florida Emergency Response Plan</li> <li>St. Lucie County Emergency Operations Plan</li> <li>Martin County Emergency Operations Plan</li> </ul>	
317.		[CEP P.8] The NextEra emergency plan contains a specific table of contents. The emergency plan paragraphs are numbered corresponding to the NUREG-0654/FEMA-REP-1 R2 evaluation criteria. Evaluation criteria which do not apply to utilities are listed and identified.	Non-RIE Added commitment to meet NUREG 0654, R2 Element
318.	7.3 5. Audits The FPL Nuclear Assurance Department will perform an independent audit of the Emergency Preparedness Program. The audits will verify compliance with federal regulations to include evaluation of the adequacy of the interfaces with State and Local governments, and of drills, exercises,	[CEP—P.9] Emergency preparedness program elements are reviewed by persons that have no direct responsibility for the implementation of the emergency preparedness program, in accordance with 10 CFR 50.54(t).	Editorial Removed details of 10 CFR 50.54(t) and state "in accordance with" No added, removed or altered commitments or change of intent.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	capabilities and procedures. This audit shall be conducted either:		
	1) At least every 12 months, or		
	2) As necessary, based on an assessment against performance indicators, and as soon as reasonably practicable after a change occurs in personnel, procedures, equipment, or facilities that potentially could adversely affect emergency preparedness, but no longer than 12 months after the change. In any case, all elements of the Emergency Preparedness Program must be reviewed once every 24 months.		
	The part of the review involving the evaluation for adequacy of interface with State and Local governments must be available to the appropriate State and Local governments.		
	Plant management, Corporate Functional Area Manager (CFAM), and the Chief Nuclear Officer will receive audit reports. Corrective actions, as delineated in the Quality Assurance Manual, will be assigned.  The audit findings shall be retained for a minimum of		
	5 years.		
319.	6. Document Distribution	[CEP P.5]	Editorial
	St. Lucie Plant Document Control is responsible for distribution of the Emergency Plan and Emergency Plan Implementing Procedures to identified personnel and to Emergency Response Facilities. Document Control also distributes the Emergency Plan to off-site agencies and organizations. The Emergency Plan Implementing Procedures provide sufficient information to assure a thorough understanding of the various emergency response duties and responsibilities. Appendix F contains a listing of the Emergency Plan Implementing Procedures.  The locations where The State of Florida Radiological Emergency Management Plan is maintained are listed in Appendix D.	Revised copies of the emergency plan are posted and distributed in accordance with NextEra records management system procedures.  Changes to the emergency plan are submitted to the NRC in accordance with 10 CFR 50.4.	No added, removed or altered commitments or change of intent.
320.	7. Emergency Preparedness Coordinator	[CEP P.1]	Editorial

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	Training Most training of FPL Emergency Preparedness Coordinators is through on-the-job training related to Plan preparation, periodic revisions, and drills and exercises for two nuclear facilities. Other training may be received through seminars, meetings, and discussions with other industry groups. FPL is a member of and participates in emergency planning programs sponsored by the Institute of Nuclear Power Operations (INPO) and the Southeastern Utilities Emergency Planning Group (SUEPG).	Initial EP program training for new EP staff members is performed and documented.  Continuing training of EP staff members is performed periodically through job related opportunities (such as courses, workshops, information exchange meetings with other licensees, conferences held by industry and government agencies, etc.) to maintain current knowledge of the overall planning effort or to enhance working knowledge of plant operations.	No added, removed or altered commitments or change of intent.
321.	7.4 Emergency Equipment Maintenance	[CEP H.11]	Potential RIE 6-5
	All designated emergency equipment that is maintained in each Control Room, the TSC, OSC, EOF and the Site Assembly Station will be inventoried, operationally checked, and inspected at least once each calendar quarter and following each use.	NextEra emergency equipment and kits are inventoried to verify adequate supplies and materials, and inspect condition semi-annually and following each use.  Emergency use equipment and instruments are operationally checked semi-annually during the inventory, and prior to use if needed as specified in procedures.  Sufficient reserves of instruments and equipment are maintained to replace those removed from service for calibration or repair.  [CEP H.11.a]  NextEra personnel are responsible for oversight of maintenance and testing of emergency equipment.  [CEP H.11.b]  Requirements to calibrate emergency equipment and instruments are specified in site procedures.  [CEP H.12]  Emergency kits are assembled for radiation protection, field monitoring, first aid or other emergency use needs based on location and availability at each site.  Details of emergency kit contents and locations are contained in site procedures used to maintain facilities and equipment.	Refer to assessment Section 2.5 for the disposition of this item.
322.	7.5 Letters of Agreement	[CEP – DP-4]	Editorial

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Agreements with supporting agencies will be confirmed annually (by direct contact, telephone, or in correspondence). The Letters of Agreement (LOAs) will be updated every third year. Purchase orders/contracts will be renewed as required.	Letters of Agreement will be reviewed and verified on an annual basis, and updated if warranted.	No added, removed or altered commitments or change of intent.
	Appendices		
323.	APPENDIX A, EMERGENCY CLASSIFICATION HOT CONDITIONS TABLE	[PSL Annex – D.1] The PTN EAL scheme is documented in EP-PTN-131, EAL Technical Basis Manual.	Editorial Removed duplicate information from CEP. Information on Emergency
			Classification is contained in EAL Technical Basis Manual which is considered part of the Plan.
324.	APPENDIX B, EMERGENCY CLASSIFICATION	[PSL Annex – D.1]	Editorial
	FISSION PRODUCT BARRIER CHART	The PTN EAL scheme is documented in EP-PTN-131, EAL Technical Basis Manual.	Removed duplicate information from CEP.
			Information on Emergency Classification is contained in EAL Technical Basis Manual which is considered part of the Plan.
325.	APPENDIX C, EMERGENCY CLASSIFICATION COLD CONDITIONS TABLE	[PSL Annex – D.1] The PTN EAL scheme is documented in EP-PTN-131, EAL Technical Basis Manual.	Editorial Removed duplicate information from CEP. Information on Emergency Classification is contained in EAL Technical Basis Manual which is considered part of the Plan.
326.	327.APPENDIX D, STATE OF FLORIDA RADIOLOGICAL EMERGENCY MANAGEMENT PLAN FOR NUCLEAR POWER PLANTS		Non-RIE Removed ORO Plan. ORO Emergency Plans maintained by OROs
328.	APPENDIX E, TECHNICAL SUPPORT AGREEMENTS  • Westinghouse Electric (ABB/CE)  • AECOM  • Institute of Nuclear Power Operations (INPO)  • U.S. Coast Guard	[PSL Annex – A.4] Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by PSL with the following organizations:  • Westinghouse Electric (ABB/CE)  • AECOM	Editorial Letters of agreement now listed in body of PSL Annex

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	<ul> <li>Florida Highway Patrol</li> <li>St. Lucie County Sheriff's Department</li> <li>St. Lucie County - Ft. Pierce Fire District</li> <li>City of Ft. Pierce - Police Department</li> <li>City of Ft. Pierce - City Manager</li> <li>Martin County Sheriff's Department</li> <li>AREVA NP Inc. (Framatome Technologies)</li> <li>U.S. Department of Energy (Savannah River Operations)</li> <li>U.S. Department of Energy (REAC/TS)</li> <li>Lawnwood Regional Medical Center</li> <li>Martin Memorial Medical Center</li> <li>Bechtel Power Corporation</li> <li>Martin County Fire Rescue</li> <li>Martin County Department of Emergency Services</li> </ul>	<ul> <li>Institute of Nuclear Power Operations (INPO)</li> <li>U.S. Coast Guard</li> <li>Florida Highway Patrol</li> <li>St. Lucie County Sheriff's Department</li> <li>St. Lucie County Fire District</li> <li>City of Ft. Pierce - Police Department</li> <li>City of Ft. Pierce - City Manager</li> <li>Martin County Sheriff's Department</li> <li>AREVA NP Inc. (Framatome Technologies)</li> <li>U.S. Department of Energy (Savannah River Operations)</li> <li>U.S. Department of Energy (REAC/TS)</li> <li>Lawnwood Regional Medical Center</li> <li>Cleveland Clinic Martin Health</li> <li>Bechtel Power Corporation</li> <li>Martin County Fire Rescue</li> <li>Martin County Department of Emergency Services</li> </ul>	
329.	APPENDIX F, LISTING OF EMERGENCY PLAN IMPLEMENTING PROCEDURES	[CEP—P.7] Table P.7-1 provides a listing, by title, of the common response and maintenance procedures required to implement the emergency plan, and the section(s) of the emergency plan to be implemented by each procedure.  A listing, by title, of the site-specific response and maintenance procedures required to implement the emergency plan is provided in the site annexes.  [PBN Annex – P.7] Table P.7-1 provides a listing of the PBN site-specific procedures required to maintain and implement the emergency plan, and the section(s) of the emergency plan implemented by each procedure.	Editorial Procedure list and reference to section of the plan implemented now contained is Section P of CEP and PBN Annex EPIPs to be converted following approval of CEP.

# **ENCLOSURE 4**

# **Turkey Point Nuclear Plant**

**Analysis Report #4** 

**Current to Proposed Emergency Plan Comparison Analysis** 

(134 pages follow)





# Turkey Point Nuclear Plant (PTN)

# Analysis Report #4 Current to Proposed Emergency Plan Comparison Analysis

09/21/22

## 1. INTRODUCTION

This comparison analysis identifies the differences between the current emergency plan (Revision 69) and the proposed NextEra Common Emergency Plan (CEP) and PTN Emergency Plan Site Annex.

Differences between the content of current emergency plan and the proposed emergency plan were evaluated to determine whether any potential reductions in effectiveness were introduced by changes made.

# 2. REVIEW METHODOLOGY

The comparison between the current emergency plan and the proposed emergency plan was made as follows:

- 1. The first step compares the content of the current emergency plan to the proposed emergency plan to determine whether there was any change. Comparisons where the wording is the same are identified as '**No Change**'.
- 2. Where a difference does exist between the wording of the two documents, it is evaluated as Editorial, No Reduction in Effectiveness or a Potential Reduction in Effectiveness. The definitions for the differences are as follows:
  - **Editorial** Differences that include typographical, formatting, paragraph numbering, spelling, grammar, punctuation, or title; or wording changes that do not alter intent of the original content or level of commitment.
  - No Reduction in Effectiveness (Non-RIE) Differences in intent or methods of
    performing a function that sustain or improve the licensee's capability to perform
    an emergency planning function in the event of a radiological emergency.
  - **Potential Reduction in Effectiveness** (**Potential RIE**) Differences that may result in reducing the licensee's capability to perform an emergency planning function in the event of a radiological emergency.

Potential RIEs were then further evaluated to determine if an actual RIE exists. All Potential RIEs are dispositioned in Section 2, Summary.

## 3. SUMMARY

The results of the comparison between the current emergency plan and the proposed emergency plan revealed the following changes that could be considered reductions in effectiveness.

# 3.1 [Potential RIE 6-1] Row 258 – Reduced Hospital and Ambulance Drill Participation and Periodicity

# **Current Emergency Plan**

# [7.1.4.3 Medical Emergency Drill]

A medical emergency drill involving a simulated contaminated individual, with provisions for participation by local support services (i.e., ambulance and off-site medical treatment facility), will be conducted at least once every calendar year. Participation by local support services (i.e., ambulance and off-site medical treatment facility), may be tested separately or as part of the annual medical drill.

# **Common Emergency Plan & Site Annex**

[CEP - N.4.a]

Each NextEra site will conduct an onsite simulated medical drill once per calendar year.

The scope of the emergency medical drill will include a simulated on-site injured and contaminated individual and medical/ first aid treatment, including contamination control.

Emergency Medical Drill offsite participation and periodicity for support Hospital and Ambulance services are performed in accordance with the 42 CFR 482.15 regulations and are not included in the scope of the station medical drills.

# **Disposition**

The hospitals are accredited by The Joint Commission in compliance with 42 CFR 482.15, Condition of Participation: Emergency Preparedness. The regulations and accreditation require the hospitals to maintain an emergency plan and that the emergency preparedness program include, but not be limited to, the following elements (excerpts from the 42 CFR 482.15 regulation):

- (a) Emergency plan. The hospital must develop and maintain an emergency preparedness plan that must be reviewed, and updated at least every 2 years. The plan must do the following:
  - (1) Be based on and include a documented, facility-based and community-based risk assessment, utilizing an all-hazards approach.
  - (2) Include strategies for addressing emergency events identified by the risk assessment.
  - (4) Include a process for cooperation and collaboration with local, tribal, regional, State, and Federal emergency preparedness officials' efforts to maintain an integrated response during a disaster or emergency situation.
- (b) Policies and procedures. The hospital must develop and implement emergency preparedness policies and procedures, based on the emergency plan set forth in paragraph (a) of this section, risk assessment at paragraph (a)(1) of this section, and the communication plan at paragraph (c) of this section. The policies and procedures must be reviewed and updated at least every 2 years.
- (d) Training and testing. The hospital must develop and maintain an emergency preparedness training and testing program that is based on the emergency plan set forth in paragraph (a) of this section, risk assessment at paragraph (a)(1) of this section, policies and procedures at paragraph (b) of this section, and the communication plan at paragraph (c) of this section. The training and testing program must be reviewed and updated at least every 2 years.
  - (1) Training program. The hospital must do all of the following:
    - (i) Initial training in emergency preparedness policies and procedures to all new and existing staff, individuals providing services under arrangement, and volunteers, consistent with their expected role.
    - (ii) Provide emergency preparedness training at least every 2 years.

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#### **Disposition**

- (iii) Maintain documentation of the training.
- (iv) Demonstrate staff knowledge of emergency procedures.
- (v) If the emergency preparedness policies and procedures are significantly updated, the hospital must conduct training on the updated policies and procedures.
- (2) Testing. The hospital must conduct exercises to test the emergency plan at least twice per year. The hospital must do all of the following:
  - (i) Participate in an annual full-scale exercise that is community-based; or
    - (A) When a community-based exercise is not accessible, conduct an annual individual, facility-based functional exercise; or.
    - (B) If the hospital experiences an actual natural or man-made emergency that requires activation of the emergency plan, the hospital is exempt from engaging in its next required full-scale community-based exercise or individual, facility-based functional exercise following the onset of the emergency event.
  - (ii) Conduct an additional annual exercise that may include, but is not limited to the following:
    - (A) A second full-scale exercise that is community-based or an individual, facility-based functional exercise; or
    - (B) A mock disaster drill; or
    - (C) A tabletop exercise or workshop that is led by a facilitator and includes a group discussion, using a narrated, clinically-relevant emergency scenario and a set of problem statements, directed messages, or prepared questions designed to challenge an emergency plan.
  - (iii) Analyze the hospital's response to and maintain documentation of all drills, tabletop exercises, and emergency events, and revise the hospital's emergency plan, as needed.

Therefore, the hospitals use an all-hazards approach to determine the community-risk and priorities of its emergency response preparation (training, drills, etc.) on the risk / priority. Maintaining the Contaminated Medical Emergency Drill annual frequency, places a false priority /risk and circumvent the 42 CFR 482.15 community all-hazards regulations for the hospitals.

Ambulance services are under different regulations (primarily state regulations) but serves the same demographic and has similar community-risk and priority profile. Per the 42 CFR 482.15 regulation, the hospital's emergency plan includes cooperation and collaboration of local emergency preparedness officials and an annual full-scale community-based drill. CEP Section O.1.a, NextEra will continue to offer emergency response training annually to the ambulance service(s). Training includes basic radiation protection, the notification process for their organization, and their organization's expected role.

This change removes the requirement for hospital and ambulance participation in the annual emergency medical drill. The proposed CEP revision retains all other previous Offsite Response Organization (ORO) arrangements including offered annually training, offered participation in drills and pre-arrangements documented in Letters of Agreement (LOAs).

NextEra stations will continue to meet the requirements of 10 CFR 50.47(b)(14) and 10 CFR Part 50, Appendix E, Section IV.F.1. NextEra stations will continue to have arrangements with the OROs; annual training will be offered, and hospital participation in the emergency medical drill will be coordinated under 42 CFR 482.15 requirements. NextEra stations will participate in the hospital's community risk assessments to ensure the station's is properly risk evaluated and prioritized.

On-site emergency medical drill and training will be provided annually for the station's ERO. The training process/program will determine the need for additional on-site drills included in the training.

This drill participation arrangement was discussed with the OROs (hospitals and ambulance providers) and their concurrence is documented in Enclosure 10.

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# **Disposition**

The 10 CFR Part 50 Appendix E and 10 CFR 50.47(b) regulations do not specify a frequency to perform the emergency medical drill. The annual frequency is specified in NUREG-0654 and provides the NRC approved guidance how to comply with the regulations. Licensees "may voluntarily use the guidance in the document to demonstrate compliance" with the NRC regulations or provide "methods or solutions that differ from those described." The alternate method of basing the drill frequency on the ORO community-risk assessment is appropriate and meets the intent of the planning standards.

The change to the emergency medical drill scope retains the annual requirement for the station while allowing the hospital and ambulance service the ability to participate under and within their regulatory requirements. This should provide a commitment which the NRC can evaluate as an acceptable alternate method to comply with 10 CFR Part 50 Appendix E and 10 CFR 50.47(b) regulations.

# 3.2 [Potential RIE 6-2] Row 261 – Altered Annual Unannounced Communication Drills

#### **Current Emergency Plan**

# 7.1.4.6 Unannounced Drills]

At least one communications drill per year will be unannounced. This unannounced drill will include notification to primary off-site response agencies (i.e., DEM, Florida Health Bureau of Radiation Control, County Emergency Management agencies) and those FPL emergency response personnel required to be notified based upon the drill scenario. The unannounced communication drill may coincide with an exercise or an actual Emergency Plan Activation.

Since the exercise scenarios are held confidential; fire, medical, evacuation, communication, and accountability drills, conducted in conjunction with an annual exercise are unannounced (actual time and specific details of the simulated events are not released).

# Common Emergency Plan & Site Annex

**ICEP - F.31** 

Communication systems testing is accomplished in accordance with Table F-1.

Table F-1: Communication System Testing
Requirements
Communication Testing Requirement

System		
ORO Notification	Monthly <sup>(a)</sup>	
System		
NRC FTS (ENS)	Monthly <sup>(b)</sup>	
Network		
ERDS	Verify Transmission	
ERDS	Quarterly	
ERO Notification	Per Elements N.4.h	
System	and N.4.i	
Field Monitoring	Annually <sup>(a)</sup>	
Teams Communication	-	
Telephone System	Frequent Use (c)	
Station Radio System	Frequent Use (c)	
Station PA System	Frequent Use (c)	
ANS	per site specific ANS	
ANS	Design Report	

- (a) Test credit may be given by successful use in a drill.
- (b) NRC ENS in the Control Room is Frequent Use. TSC and EOF require monthly testing.
- (c) Communication systems that are listed with a testing frequency of "Frequent Use" indicate that the associated equipment is normally used at a sufficient high regularity, such that separate additional testing is not needed.

[CEP - N.4.i]

The NextEra ERO notification is an all-call process. Each NextEra site will conduct an off-hours unannounced ERO call-in drill biennially to verify each minimum staffing ERO position meets the required Table B-1 response time.

Current Emergency Plan

Current Emergency Plan	Common Emergency Plan & Site Annex
	The scope of the off-hours unannounced ERO call-in drill will require collection of the ERO notification system report which documents response within the required time.
	Completion of an Element N.4.h off-hours unannounced ERO report-in drill satisfies the requirements of the off-hours unannounced ERO call-in drill in this element.
	The Off-Hours Call-In Drill requirement may be satisfied by an actual event provided the objectives are evaluated and documented in a critique report.

# Disposition

Current Emergency Plan

1. Requirement for an annual unannounced communications drill with the ORO has been removed.

ORO warning points are staffed 24/7 with communications tests required monthly. ERO performance of ORO notification are now monitored under the ROP inspection process by the DEP performance indicator. Credited DEP notification is demonstrated on average more than 50x per year. No regulation, guidance or inspection procedure call for an annual unannounced communications drill with the ORO.

- Restoring the scope and periodicity of communications drills and unannounced drills to consistency with the NUREG-0654 criteria does not impact the ability of the ERO or ORO to perform the notifications function, demonstrating full capability of the function.
- 2. Requirement for an annual unannounced communications drill with the ERO duty team has been changed to biennial.

NUREG-0654 R2 calls for quarterly off-hours call-in drills, such that each ERO member's normally expected response time is assessed at least biennially, with some drills being unannounced. The NextEra ERO notification is an all-call process, which for call-in drills will collect response time estimates from the entire ERO. This process validates all ERO members' response time each time it is used. The CEP drill criteria requires that the biennial ERO call in drill to be unannounced. This change aligns the CEP drill requirement with the intent of NUREG-0654 R2 criteria and provides a shorter periodicity for the testing of the full ERO notification process (annual team testing results in full testing every four years vs. every two years under the new criteria).

Adopting the NUREG-0654 R2 criteria for ERO call-in drills does not impact the ability of the ERO to perform the augmentation function.

Common Emergency Plan & Site Annex

# 3.3 [Potential RIE 6-3] Row 266 – Removed EP Initial Training of Non-ERO Personnel

Carront Emorgonoy i lan	Common Emergency Flam a cite / milex
[7.2.2 Training of Emergency Response	N/A
Organization (ERO) Personnel]	
For employees not assigned specific	
responsibility under the Emergency	
Preparedness Program, initial orientation	
training shall provide at a minimum, information	
describing the action to be taken by an	
individual discovering an emergency condition,	
the location of assembly areas, the	
identification of emergency alarms, and action	
to be taken on hearing those alarms.	

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# Disposition

R1 and R2 of NUREG-0654 do not contain criteria requiring a description of training for non-ERO/non-essential personnel within the emergency plan). No regulation, other guidance document or inspection procedure calls for a description of non-ERO general employee training to be contained in the emergency plan.

General industrial safety information, which includes awareness and expectations to normal, offnormal and emergency situations is provided to all personnel given unescorted access onto the site. General employee training for unescorted site access includes topics of safety conscious work environment (SCWE), stormwater pollution prevention (SWPP), spill prevention and control, hearing conservation, emergency plan, and fire extinguishers and is presented in the NANTel Generic Awareness and NextEra site specific site access training courses.

Site specific general awareness training scope (industrial and emergency condition related) is governed and controlled outside the emergency plan.

Emergency plan awareness content review in general employee training by personnel knowledgeable of the emergency plan is provided in document controls processes and procedures. These processes and procedures are also applicable to changes to made by other non-EP departments that could potentially impact the emergency plan.

# 3.4 [Potential RIE 6-4] Row 270 – Reduced ERO Roster Review Periodicity from Quarterly to Semiannually

# **Current Emergency Plan**

[7.3.2 Review of the Emergency Plan and **Emergency Plan Implementing Procedures**] The Emergency Plan and Emergency Plan Implementing Procedures will be under continuing review by the site emergency planning group. A comprehensive review of the Emergency Plan will be conducted annually. The Emergency Plan Implementing Procedures are reviewed during drills, exercises, and actual emergencies and revised as necessary to correct identified deficiencies. The Emergency Plan Implementing Procedures will undergo a thorough formal review at least once every two years and be revised as necessary. Notification lists and rosters will be updated at least quarterly. If changes affecting emergency response are identified, these changes will be made as needed. The revised Emergency Plan will be distributed with the latest revision number indicated on each page. Revision bars along the right margin will be used to indicate where changes have been made. If during these annual reviews no changes are needed, this will be documented.

Changes to the Emergency Plan will be submitted, in writing or with pages marked for revision, to the site Emergency Preparedness Manager, or designee, in Emergency Preparedness. All proposed changes to the Emergency Plan shall be reviewed by the Onsite Review Group (ORG) and, prior to implementation, approved by the Site Vice President - Turkey Point Plant, the senior executive responsible for the safe operation of the plant. Revisions to the Emergency Plan will

# **Common Emergency Plan & Site Annex**

[CEP - P.4]

The formal emergency plan (as defined in the introduction section) and the emergency plan implementing procedures (as defined in Section P.7) will be reviewed on an annual basis and updated if necessary. Any changes to regulations, issues identified by drills and exercises, assessments and audits, or other updates will be evaluated and incorporated into the emergency plan if warranted.

Letters of Agreement will be reviewed and verified on an annual basis, and updated if warranted.

Changes will be processed in accordance with 10 CFR 50.54(q) requirements and NextEra document control/records management procedures.

[CEP - P.5]

Revised copies of the emergency plan are posted and distributed in accordance with NextEra records management system procedures.

Changes to the emergency plan are submitted to the NRC in accordance with 10 CFR 50.4.

[CEP - P.3]

The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations.

[CEP - P.10]

The NextEra emergency communications

#### **Current Emergency Plan**

# be sent to the Corporate Functional Area Manager/Peer Team Lead (CFAM/PTL). Changes to the EPIPs are performed in accordance with plant procedures. EPIPs are approved by the site Emergency Preparedness Manager unless changes are identified for

Manager unless changes are identified for evaluation by the Onsite Review Group (ORG) with approval recommended to the Site Vice President.

Document holders will receive revisions to the Emergency Plan as they are issued. The site **Emergency Preparedness Manager is** responsible for coordinating the periodic reviews of the Emergency Plan. The site Emergency Preparedness Manager will ensure that elements of the emergency organization (FPL, State, local, Federal) are informed of changes to the Emergency Plan. The site **Emergency Preparedness Manager is** responsible for maintaining emergency preparedness. He/she maintains a roster of the **Emergency Response Organization** participants and their alternates. This roster is reviewed and confirmed periodically, typically once each calendar quarter. Each participant is responsible for advising the site Emergency Preparedness Manager when his/her duties are changed such that he/she can no longer participate. In the event of transfer or termination, the site Emergency Preparedness Manager should be notified by the employee's department head, and a replacement named and trained.

Responsibility for day-to-day emergency planning coordination lies with the site Emergency Preparedness Manager.

# **Common Emergency Plan & Site Annex**

directory contains select contact numbers for ORO and support organizations identified in the emergency plan and implementing procedures. The ERO call-out system contains comprehensive ERO contact information.

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NextEra ERO contact information is verified semi-annually and updated as needed. Facility and support contact information in the emergency communications directory is verified annually and updated as needed.

# Disposition

Due to the local relationships and the advancement of technology, the quarterly emergency telephone directory review is being changed to a semi-annual review. Historically, little change between quarters has occurred such that changing to a semi-annually review would have little impact on accuracy.

With cellular phones being the primary notification tool for ERO personnel, there is not nearly as many changes of phone numbers. In the past, if an individual moved their residence, their phone number likely did not travel with them as the numbers were tied to geographical regions within the city or town they were moving (land lines). With cell phones and changes to long distance billing, many people keep their same cell phone number as they move, whether across town or across country.

Most businesses or other support contacts that are listed in emergency telephone directory are established entities that do not change their business lines often enough to warrant a check every quarter. In addition, the internet is now the primary location to obtain business numbers, with these numbers readily available fewer numbers are required to be maintained in EP phone lists.

# 3.5 [Potential RIE 6-5] Row 276 – Reduced Emergency Equipment and Kit Inventories Periodicity from Quarterly to Semiannually

# **Current Emergency Plan**

[7.4 Emergency Equipment/Maintenance]
An inventory, an operational check, and an inspection of all emergency equipment/ instrumentation that is maintained in the Control Room, TSC, OSC, EOF and the field monitoring equipment located in the Florida City Substation is performed at least once each calendar quarter and following each use.

## **Common Emergency Plan & Site Annex**

[CEP - H.11]

NextEra emergency equipment and kits are inventoried to verify adequate supplies and materials, and to inspect condition semi-annually and following each use.

Emergency use equipment and instruments are operationally checked semi-annually during the inventory, and prior to use if needed as specified in procedures.

Sufficient reserves of instruments and equipment are maintained to replace those removed from service for calibration or repair.

# Disposition

NUREG-0654 R2 element H.11 calls for a description of the provisions made for the testing and maintenance of emergency use equipment and supplies. Previous versions (NUREG-0654 R1 and draft R2) specified a quarterly periodicity. The quarterly periodicity was intentionally removed from the final approved version of NUREG-0654 R2 specifically to allow EP programs greater latitude in establishing inventory periodicities for infrequent use items.

Requirements to calibrate emergency equipment and instruments are specified in site procedures [CEP – H.11.b] and continue to be performed per national standards or the manufacturer's instructions.

Requirements to operationally check emergency equipment and instruments prior to use are procedurally required as applicable.

Historic records provide evidence that emergency use equipment and supplies inventories identify few, if any, issues such that an increased periodicity would not have an adverse effect on availability.

Changing the inventory periodicity from quarterly to semi-annual does not degrade the capability of the equipment and supplies to perform their function.

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Note: Tables and figures contained in the current emergency plan and the CEP/site annex are not included in the following comparison table. All tables and figures were reviewed for possible commitments and key items were included at the end of the comparison table.

#	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
	General Information		
1.	[1.1 Purpose]	[CEP – Introduction]	Non-RIE
	<ul> <li>This Emergency Plan contains Florida Power &amp; Light Company's plans for coping with radiological emergencies at the Turkey Point Nuclear Power Plant, (Units 3 and 4) located in Miami-Dade County, Florida. The plan has been designed to preclude or mitigate the adverse health and safety effects of an emergency. Four general objectives have been considered in the development of this plan:</li> <li>1) Timely and accurate assessment of off-normal or emergency conditions and proper notification of responsible authorities.</li> <li>2) Effective coordination of emergency actions among all organizations having a response role.</li> <li>3) Continued assessment of actual or potential consequences both on site and offsite.</li> <li>4) Continuing maintenance of an adequate state of emergency preparedness.</li> </ul>		Revised introductory wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format.
		Appendix 1 – Definitions	
2.			Non-RIE
		or mishap resulting in, or potentially resulting in, physical injury or injury due to radiation exposure or excessive exposure to radioactive materials.	Definition added to align fleet terms.
3.		Activated: an emergency response facility is declared	Non-RIE
		activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions.	Definition added to align fleet terms.
4.	Airliner - Airliner is meant to be a large aircraft with the		Non-RIE
	potential for causing significant damage to the plant.		Definition removed. Applied to previous NRC approved 99-01 R5 EAL scheme. Term is no longer applicable in current EAL scheme.
5.	Annual - Occurring once per calendar year (January 1	1 31	Non-RIE
	through December 31).	once per calendar year. For training and qualification	Revised definition of annual for

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		periodicity and work products, annual is every 12 months not to exceed 15 months.	consistency with NRC and FEMA definition used in managing the cycle.
6.	Assessment Actions - Those actions taken during or after an emergency event to obtain and process information necessary to make decisions to implement specific emergency measures.		Non-RIE  Definition removed. Term is not applicable to formal definition and applies before, during and post event.
7.	Company - Florida Power & Light Company (FPL)/NextEra Energy (NEE)		Removed, not a definition. Abbreviations are provided as they occur in the document and/or in appendix 2. No added, removed or altered commitments or change of intent.
8.		Concept of Operations: delineation of an organization's roles and responsibilities and how the organization will function to accomplish those responsibilities.	Non-RIE  Definition added to align fleet terms.
9.	Confinement Boundary - The barrier(s) between spent fuel and the environment once the spent fuel is processed for dry storage. As related to the PTN ISFSI, Confinement Boundary is defined as the NUHOMS Dry Shielding Canister (DCS) (Turkey Point Nuclear Generating Emergency Action Level Technical Bases Document, Ref. 4.1.10).		Removed duplication definition already in EAL TBD.  No added, removed or altered commitments or change of intent.
10.	Containment Closure - The procedurally defined conditions or actions taken to secure containment and associated structures, systems, and components as a functional barrier to fission product release under shutdown conditions.  Containment Closure requirements are specified in 0-ADM-051, Outage Risk Assessment and Control.		Editorial Removed duplication definition already in EAL TBD. No added, removed or altered commitments or change of intent.
11.	Corporate Functional Area Manager (CFAM)/Peer Team Lead (PTL) - Emergency Preparedness. The highest authority in a specific functional area. The purpose of the CFAM is to provide fleet wide leadership and direction to position the applicable functional area as a top industry performer. The CFAM/PTL provides oversight of functional area		Non-RIE  Definition removed. Normal organizational titles and hierarchy descriptions provided in corporate and site documents.  Program responsibilities

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	programs, policies and processes utilizing assessment reports, performance indicators and peer groups to assess the health of programs, policies and processes. The CFAM/PTL works with the Site Functional Area Manager (SFAM), which is the site Emergency Preparedness Manager. CFAM/PTL is responsible for ensuring each site and the division maintains a state of emergency preparedness.		documented in Section P.
12.	Corrective Actions - Those measures taken to mitigate or terminate an emergency situation at or near the source of the problem in order to prevent an uncontrolled release of radioactive material or to reduce the magnitude of a release, e.g., shutting down equipment, fire fighting, repair, and damage control.		Non-RIE  Definition removed. No basis for definition. Term has different common use meaning under CAP.
13.		Dosimeter: an instrument used to measure and record radiation doses or dose rates.	Non-RIE  Definition added to align fleet terms.
14.	Duty Call Supervisor - A designated supervisor assigned from the nuclear plant staff to provide 24-hour response to any emergency upon notification by the Shift Manager. The Duty Call Supervisor is responsible for notifying the Emergency Response Organization and, as requested, plant management in the event of an emergency.		Non-RIE  Definition removed. Normal organizational titles and hierarchy descriptions provided in corporate and site documents.
15.	Emergency - Any off-normal event or condition which		Non-RIE
	is classified into one of the four event Emergency Classification Levels. A radiological emergency at the plant is classified in accordance with Section 3, Emergency Classification System and Emergency Plan Implementing Procedures (EPIPs). The four classifications of emergencies are Unusual Event, Alert, Site Area Emergency, and General Emergency.		Definition removed. No reason to define the word differently than the common dictionary definition.
16.	Emergency Action Levels (EALs) - A pre-determined, site-specific, observable threshold for an INITIATING CONDITION that, when met or exceeded, places the plant in a given emergency classification level.		Editorial Removed duplication definition already in EAL TBD. No added, removed or altered commitments or change of intent.
17.	Emergency Classification Level (ECL) - One of a set of names or titles established by the US Nuclear Regulatory Commission (NRC) for grouping off-normal events or conditions according to (1) potential or		Editorial Removed duplication definition already in EAL TBD.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	actual effects or consequences, and (2) resulting onsite and offsite response actions. The Emergency Classification Levels, in ascending order of severity are: - Unusual Event (UE) - Alert - Site Area Emergency (SAE)		No added, removed or altered commitments or change of intent.
	- General Emergency (GE)		Non DIE
18.	Emergency Coordinator (EC) - The title assumed by the Shift Manager or member of the plant management staff, in the event of a radiological emergency at the Plant. The EC is responsible for notifying offsite authorities, both inside and outside the Company, and has full authority and responsibility for on-site emergency response actions. The EC is also responsible for Protective Action Recommendations during the initial stages of an emergency.		Non-RIE  Definition removed. Previous ERO title. Current ERO titles and responsibilities documented in Section B.
19.	Emergency Information Manager (EIM) - A senior manager or designated member of the Corporate Communications Department who directs the operation of the Joint Information Center, develops news releases, and serves as a spokesperson for the company. The EIM will serve as official spokesperson for the Nuclear Division.		Non-RIE Definition removed. Previous ERO title. Current ERO titles and responsibilities documented in Section B.
20.	Joint Information Center (JIC) - A designated facility for use by the EIM and staff in communicating with the news media. Public information officers from State, Local, and Federal response agencies may also function from the JIC		Non-RIE Definition removed. Current JIC description documented in Section G (common emergency plan and site annex).
21.	Emergency Operations Centers (EOCs) - Designated off-site facilities from which the Miami-Dade County, Monroe County and State of Florida Emergency Response Organizations will direct necessary assessment and protective actions for off-site areas.		Non-RIE
22.	Emergency Operations Facility (EOF) - A designated off-site facility from which FPL emergency activities are conducted. These activities include assessment, protective action recommendations, and coordination with State and County officials.		Non-RIE  Definition removed. Current EOF description documented in Section H (common emergency plan and site annex).
23.	Emergency Operating Procedures (EOPs) - Specific		Non-RIE

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	procedures that provide instructions to guide plant operations during potential or actual emergency situations.		Definition removed. EOP description governed by operations.
24.	Emergency Plan Implementing Procedures (EPIPs) - A set of emergency response procedures initiated and followed by the FPL Emergency Response Organization to implement the appropriate sections of the Emergency Plan, assess and classify the emergency, notify the appropriate authorities, and provide continuing response capability (See Appendix C).		Non-RIE  Definition removed. Current EPIP description documented in Section P (see also Table P.7-1).
25.	Emergency Planning Zone (EPZ) - That area, for which emergency planning consideration of the plume exposure and ingestion pathways has been given, in order to assure that prompt and effective actions can be taken to protect the public in the event of a radiological emergency at the plant.	Emergency Planning Zone (EPZ): a geographic area surrounding a commercial NPP for which emergency planning is needed to ensure that prompt and effective actions can be taken by OROs to protect public health and safety in the event of a radiological incident. The plume exposure pathway EPZ is approximately 10 miles in radius, while the ingestion exposure pathway EPZ has a radius of approximately 50 miles.	Editorial Revised definition to align fleet terms. No added, removed or altered commitments or change of intent.
26.		Emergency Response Data System (ERDS): a direct near real-time electronic data link between the licensee's onsite computer system and the NRC Operations Center that provides for the automated transmission of a limited data set of selected plant parameters.	Non-RIE Definition added to align fleet terms.
27.	Emergency Response Organization (ERO) - That portion of the FPL organization assigned responsibilities upon initiation of the Radiological Emergency Plan for the Turkey Point Plant.	Emergency Response Organization (ERO): the personnel assigned to perform tasks and activities associated with implementation of a licensee's emergency plan for coping with radiological incidents.	Revised definition to align fleet terms.  No added, removed or altered commitments or change of intent.
28.	Emergency Response Directors - The Directors of Miami-Dade County Office of Emergency Management and Monroe County Emergency Management Department.		Non-RIE Definition removed. Current ORO titles and responsibilities documented in Section A.
29.	Emergency Security Manager (ESM) - A designated Company Manager or Supervisor who will have responsibility during a radiological emergency for security aspects of the emergency response.		Non-RIE  Definition removed. Previous ERO title. Current ERO titles and responsibilities documented in Section B.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
30.	Emergency Technical Manager (ETM) - A designated Company Manager or Supervisor who will be responsible, during a radiological emergency, for providing engineering/technical support for emergency response actions.		Non-RIE  Definition removed. Previous ERO title. Current ERO titles and responsibilities documented in Section B.
31.	Evacuation Time Estimates (ETE) - A part of the planning basis to estimate the time needed to evacuate the public from the Emergency Planning Zone (EPZ). The ETE results provide emergency planners information to support formulating a protective action strategy and assisting in protective action decisions. The ETE is conducted using the guidance in NUREG/CR-7002.	Evacuation Time Estimate (ETE): a calculation of the time it would take to evacuate the public within the plume exposure pathway EPZ under emergency conditions.	Editorial Revised definition to align fleet terms. No added, removed or altered commitments or change of intent.
32.		Evaluation: the process of observing drill or exercise performance to identify strengths and opportunities for improvement in an entity's emergency preparedness and response capabilities.	Non-RIE Definition added to align fleet terms.
33.	Explosion - A rapid, violent, and catastrophic failure of a piece of equipment due to combustion, chemical reaction or overpressurization. A release of steam (from high energy lines or components) or an electrical component failure (caused by short circuits, grounding, arcing, etc.) should not automatically be considered an explosion. Such events require a postevent inspection to determine if the attributes of an explosion are present.		Editorial Removed duplication definition already in EAL TBD. No added, removed or altered commitments or change of intent.
34.	Faulted - The term applied to a steam generator that has a steam leak on the secondary side of sufficient size to cause an uncontrolled drop in steam generator pressure or the steam generator to become completely depressurized.		Editorial Removed duplication definition already in EAL TBD. No added, removed or altered commitments or change of intent.
35.		Field Monitoring Team (FMT): a group used to detect and monitor radiation in the environment.	<b>Non-RIE</b> Definition added to align fleet terms.
36.	Fire - Combustion characterized by heat and light. Sources of smoke such as slipping drive belts or overheated electrical equipment do not constitute fires. Observation of flame is preferred, but is not required if large quantities of smoke and heat are observed.		Editorial Removed duplication definition already in EAL TBD. No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
37.	Flooding - A condition where water is entering a room or area faster than installed equipment is capable of removal, resulting in a rise of water level within the		Editorial Removed duplication definition already in EAL TBD.
	room or area.		No added, removed or altered commitments or change of intent.
38.	Freshly Off-Loaded Reactor Core - A freshly off-loaded Reactor core in the Spent Fuel Pool exists during the period of time when core off-load begins until core reload is complete.		Non-RIE  Definition removed. Applied to previous NRC approved 99-01 R5  EAL scheme. Term is no longer applicable in current EAL scheme.
39.	Hostile Action – An act toward PTN or its personnel that includes the use of violent force to destroy equipment, take HOSTAGES, and/or intimidate the		Editorial Removed duplication definition already in EAL TBD.
	licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, PROJECTILEs, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. Hostile action should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on PTN. Nonterrorism-based EALs should be used to address such activities (i.e., this may include violent acts between individuals in the OWNER CONTROLLED AREA).		No added, removed or altered commitments or change of intent.
40.	Imminent - The trajectory of events or conditions is such that an EAL will be met within a relatively short period of time regardless of mitigation or corrective actions.		Editorial Removed duplication definition already in EAL TBD. No added, removed or altered commitments or change of intent.
41.	Ingestion Exposure Pathway Emergency Planning Zone - That area, approximately 50 miles in radius from the center of the plant, for which detailed plans are made to protect people from ingestion of foodstuffs and water contaminated by radioactive materials released from the plant.	Ingestion Exposure Pathway: the principal exposure from this pathway would be from ingestion of contaminated water or foods, such as milk or fresh vegetables.  Ingestion Exposure Pathway Emergency Planning Zone: a geographic area, approximately 50 miles in radius surrounding a commercial NPP.	Editorial  Definition revised and divided to align fleet terms.  No added, removed or altered commitments or change of intent.
42.	Independent Spent Fuel Storage Installation (ISFSI) - A complex that is designed and constructed for the interim storage of spent nuclear fuel and other radioactive materials associated with spent fuel		Editorial Removed duplication definition already in EAL TBD. No added, removed or altered

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	storage.		commitments or change of intent.
43.	ISFSI Protected Area - A protected area that is located separate and apart from the normal/plant Protected		Non-RIE
	Area.		Definition removed. Applied to
	Alea.		previous NRC approved 99-01 R5
			EAL scheme. Term is no longer applicable in current EAL scheme.
			• •
44.		Letter of Agreement (LOA): a document executed between two or more parties outlining specific	Non-RIE
		arrangements relating to the accomplishment of an	Definition added to align fleet terms.
		action. Letters of agreement may cover personnel,	
		equipment, or other types of emergency support, and	
		may take the form of letters, contracts, purchase	
		orders, or other procurement mechanisms.	
45.		Memorandum of Understanding (MOU): a document	Non-RIE
		which details the respective authorities and	Definition added to align fleet terms.
		responsibilities of the signatory organizations for	
		specified radiological emergency response planning,	
		preparedness, or response.	N DIE
46.	National Oceanic and Atmospheric Administration (NOAA) - Government agency responsible for the		Non-RIE
	forecasting of weather conditions. The National		Definition removed. Current offsite
	Weather Service (NWS) is a branch under NOAA that		weather service description
	provides weather information and warning of severe		documented in Section H.
	weather situations such as hurricanes and tornadoes.		
47.	Normal Plant Operations - Activities at the plant site		Non-RIE
	associated with routine testing, maintenance, or		Definition removed. Applied to
	equipment operations, in accordance with normal		previous NRC approved 99-01 R5
	operating or administrative procedures. Entry into		EAL scheme. Term is no longer
	abnormal or emergency operating procedures, or deviation from normal security or radiological controls		applicable in current EAL scheme.
	posture, is a departure from NORMAL PLANT		
	OPERATIONS.		
48.	Operations Support Center (OSC) - An on-site		Non-RIE
	Emergency Response Facility area where FPL		Definition removed. Current OSC
	Operations, Maintenance, Radiation Protection, and		description documented in Section
	Chemistry Support personnel can report in an		H (common emergency plan and
	emergency and await assignment.		site annex).
49.		l	Non-RIE
		local governmental organization that is responsible for	Definition added to align fleet terms.
		carrying out emergency response functions during a	

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#	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
		radiological emergency.	
50.	Off site - All property outside the Protected Area.	Offsite: the area outside the Protected Area.	Editorial
			Definition revised to align fleet terms.  No added, removed or altered
E4	On site - The area within the Protected Area.	Onsite: the area inside the Protected Area	commitments or change of intent. <b>Editorial</b>
51.	On site - The area within the Protected Area.	Offsite. the area inside the Protected Area	Definition revised to align fleet terms.
			No added, removed or altered commitments or change of intent.
	Owner Controlled Area (OCA) - That portion of FPL	Owner Controlled Area (OCA): That portion of	Editorial
	property surrounding and including the Turkey Point Plant which is subject to limited access and control as	company property surrounding and including the station which is subject to limited access and control	Definition revised to align fleet terms.
	deemed appropriate by FPL.	as deemed appropriate.	No added, removed or altered commitments or change of intent.
53.		Planning Standard (PS): one of the 16 emergency	Non-RIE
		preparedness planning standards established in 10 CFR 50.47(b) that the emergency plan must meet and which are supported by the corresponding sections of 10 CFR 50 Appendix E.	Definition added to align fleet terms.
54.	Plant - The Turkey Point Nuclear Power Plant, Units 3		Non-RIE
	and 4.		Definition removed. Term not used in this context.
	Plume Exposure Pathway Emergency Planning Zone -	Plume Exposure Pathway: a term describing the	Editorial
	That area, approximately 10 miles in radius from the center of the plant, for which detailed plans are made	occurs as a result of immersion in a gaseous release	Definition revised and divided to align fleet terms.
	to protect people from exposure to a plume containing radioactive materials.	of radioactive material. The principal exposure sources from this pathway are: (a) whole body external exposure to gamma radiation from the plume and from deposited materials, and (b) inhalation exposure from the passing radioactive plume. The duration of principal potential exposures could range in length from 30 minutes to days.	No added, removed or altered commitments or change of intent.
		Plume Exposure Pathway Emergency Planning Zone: a geographic area approximately 10 miles in radius surrounding a commercial NPP	
56.		Post-Plume Phase: includes response activities that	Non-RIE
		occur after a release has been terminated. Also known	Definition added to align fleet terms.

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#	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
		as the "Environmental Phase".	
57.		Potassium lodide (KI): a prophylactic compound	Non-RIE
		containing a stable (i.e., non-radioactive) form of iodine that can be used effectively to block the uptake of radioactive iodine by the thyroid gland in a human being.	Definition added to align fleet terms.
58.	Projectile - An object directed toward a Nuclear Power		Editorial
	Plant that could cause concern for its continued operability, reliability, or personnel safety.		Removed duplication definition already in EAL TBD.
			No added, removed or altered commitments or change of intent.
59.	Protected Area - The area (within the OWNER		Editorial
	CONTROLLED AREA) occupied by the nuclear units and associated equipment and facilities enclosed within the security perimeter fence. The area within which accountability of personnel is maintained in an emergency.	Area) occupied by the nuclear unit(s) and associated equipment and facilities enclosed within the security perimeter fence. The area within which accountability of personnel is maintained in an emergency when required.	No added, removed or altered commitments or change of intent.
60.		·	Non-RIE
		an individual, resulting from a radiological incident at which a specific protective action to reduce or avoid that dose is warranted.	Definition added to align fleet terms.
61.		Protective Action Recommendation (PAR): a formal	Non-RIE
		1	Definition added to align fleet terms.
62.	Protective Actions - Those measures taken for the		Non-RIE
-	purpose of preventing or minimizing radiological exposure to persons during an emergency.		Definition removed. No basis for definition. Term can apply outside an emergency.
63.	Quarterly - Occurring once per calendar quarter, with		Non-RIE
	quarters ending on March 31, June 30, September 30 and December 31 in a year.		Definition removed. Common understanding of the term.
64.	Radiation Controlled Area (RCA) - The area (within		Non-RIE
	the Protected Area) wherein personnel access is restricted for the purpose of monitoring and controlling exposure to radiation.		Definition removed. Defined in RP program documents and procedures.
65.		Radioprotective Drug: a chemical compound or	Non-RIE

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		substance serving to protect or aid in protecting against the injurious effects of radiation.	Definition added to align fleet terms.
66.	REAC/TS - The Radiological Emergency Assistance Center/Training Site is operated by the Oak Ridge Associated Universities for the Department of Energy. REAC/TS serves as a backup medical facility for the Turkey Point Plant.		Non-RIE  Definition removed. Current REAC/TS description documented in Section L.
67.		Reasonable Assurance: a determination that ORO and utility plans and preparedness are adequate to protect public health and safety in the emergency planning areas of commercial NPPs.	Non-RIE Definition added to align fleet terms.
68.		Reception Center: a pre-designated facility located outside the plume exposure pathway EPZ at which the evacuated public can register; receive radiation monitoring and decontamination; receive assistance in contacting others; receive directions to congregate care centers; reunite with others; and receive general information. It generally refers to a facility where monitoring, decontamination, and registration of evacuees are conducted. A reception center is also referred to as a registration center or public registration and decontamination center.	Non-RIE  Definition added to align fleet terms.
69.	Recovery Actions - Those actions taken to restore the plant as nearly as possible to its condition before the emergency.		Non-RIE Definition removed. No basis for definition. Term not limited to plant restoration.
70.	Recovery Manager (RM) - A designated Company Senior Manager who will have responsibility during a radiological emergency for the activation and operation of the EOF. The RM has the authority to establish policy and expend funds necessary to cope with any Emergency Situations that arise.		Non-RIE Definition removed. Previous ERO title. Current ERO titles and responsibilities documented in Section B.
71.	Ruptured - The condition of a steam generator in which primary-to-secondary leakage is of sufficient magnitude to require a safety injection.		Editorial Removed duplication definition already in EAL TBD. No added, removed or altered commitments or change of intent.
72.	Safety System - A system required for safe plant operation, cooling down the plant and/or placing it in the cold shutdown condition, including the ECCS.		Editorial Removed duplication definition already in EAL TBD.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	These are typically systems classified as safety related (as defined in 10CFR50.2). Those structures, systems and components that are relied upon to remain functional during and following design basis events to assure:		No added, removed or altered commitments or change of intent.
	(1) The integrity of the reactor coolant pressure boundary;		
	(2) The capability to shut down the reactor and maintain it in a safe shutdown condition;		
	(3) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures.		
73.	Security Condition - Any security event as listed in the approved security contingency plan that constitutes a threat/compromise to site security, threat/risk to site personnel, or a potential degradation to the level of safety of the plant. A Security Condition does not		Removed duplication definition already in EAL TBD.  No added, removed or altered commitments or change of intent.
74.	involve a HOSTILE ACTION. Significant Transient - An UNPLANNED event		Non-RIE
74.	involving one or more of the following: (1) automatic turbine runback greater than 25% thermal reactor power, (2) electrical load rejection greater than 25% full electrical load, (3) Reactor Trip, or (4) Safety Injection Activation.		Definition removed. Applied to previous NRC approved 99-01 R5 EAL scheme. Term is no longer applicable in current EAL scheme.
75.	Site - The Turkey Point Power Plant Protected Area.		Editorial
			Removed definition.
			Redundant to Protected Area, onsite and offsite definitions.
			No added, removed or altered commitments or change of intent.
76.		Site Boundary: the line beyond which the land or property is not owned or controlled by the licensee.	Non-RIE  Definition added to align fleet terms.
77.	Site Functional Area Manager (SFAM) - Emergency Preparedness - The Site Functional Area Manager is responsible for implementing policy, practice, programs and procedures regarding the emergency plan at the Nuclear Station. This position can also be referred to as the Site Emergency Preparedness Manager.		Non-RIE  Definition removed. Previous ERO title. Current ERO titles and responsibilities documented in Section B.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
78.	State - The State of Florida.		Non-RIE
			Definition removed. State described in site annex Section A.
79.	State Plan - The State of Florida's Radiological		Non-RIE
	Emergency Management Plan.		Definition removed. Supporting plans described in site annex Section P.
80.	System Operations Power Coordinator - An FPL		Non-RIE
	System Operations position which is staffed 24 hours per day providing uninterrupted coordination of electrical power distribution. Communication is maintained by the System Operations Power Coordinator with all FPL plants, service centers, and the General Office.		Definition removed. Term not used in common emergency plan.
81.	Technical Support Center (TSC) - A designated on-		Non-RIE
	site facility that serves as a work area for use by technical and management personnel in order to provide technical support to Control Room personnel.		Definition removed. Current TSC description documented in Section H (common emergency plan and site annex).
82.	Total Dose (TEDE) - The total exposure from both	Total Effective Dose Equivalent (TEDE): the sum of	Editorial
	external and internal (weighted) sources - Total Effective Dose Equivalent	the deep dose equivalent (for external exposures) and committed effective dose equivalent (for internal exposures).	No added, removed or altered commitments or change of intent.
83.		Transient Population: persons who do not	Non-RIE
		permanently reside in the plume exposure pathway EPZ, but may be present during an emergency.	Definition added to align fleet terms.
84.	TSC Supervisor - The person assigned to supervise		Non-RIE
	the personnel and direct the technical support activities in the TSC.		Definition removed. Previous ERO title. Current ERO titles and responsibilities documented in Section B.
85.	Thyroid Dose (CDE) - The thyroid exposure from	Thyroid Committed Dose Equivalent (CDE): the dose	Editorial
	inhaled radioiodines - Committed Dose Equivalent. Thyroid dose (CDE) is used in Protective Action determination.	to the thyroid that will be received from an intake of radioactive material by an individual during the 50-year period following the intake (10 CFR 20.1003).	No added, removed or altered commitments or change of intent.
86.	Unisolable - An open or breached system line that		Editorial
	cannot be isolated, remotely or locally.		Removed duplication definition already in EAL TBD.
			No added, removed or altered

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
			commitments or change of intent.
87.	Unplanned - A parameter change or an event that is		Editorial
	not (1) the result of an intended evolution, or (2) an		Removed duplication definition
	expected plant response to a transient. The cause of		already in EAL TBD.
	the parameter change or event may be known or		No added, removed or altered
	unknown.		commitments or change of intent.
88.	Valid - An indication, report, or condition, is considered		Editorial
00.	to be valid when it is verified by (1) an instrument		Removed duplication definition
	channel check, or (2) indications on related or		already in EAL TBD.
	redundant indicators, or (3) by direct observation by		_
	plant personnel, such that doubt related to the		No added, removed or altered
	indicator's operability, the condition's existence, or the		commitments or change of intent.
	report's accuracy is removed. Implicit in this definition		
	is the need for timely assessment.		
89.	Visible Damage - Damage to a SAFETY SYSTEM		Editorial
	train that is readily observable without measurements,		Removed duplication definition
	testing, or analysis. The visual impact of the damage		already in EAL TBD.
	is sufficient to cause concern regarding the operability		No added, removed or altered
	or reliability of the affected SAFETY SYSTEM train.		commitments or change of intent.
90.	Vital Areas - Areas within the PROTECTED AREA,		Non-RIE
	that contains equipment, systems, components, or		Definition removed. Applied to
	material, the failure, destruction, or release of which		previous NRC approved 99-01 R5
	could directly or indirectly endanger the public health		EAL scheme. Term is no longer
	and safety by exposure to radiation.		applicable in current EAL scheme.
	1.3 Scope and Applicability		
91.	The Emergency Plan describes Florida Power & Light	[CEP – Introduction]	Editorial
	Company's plans for responding to emergencies that	The NextEra emergency preparedness program is	Revised description to encompass
	may develop at the Turkey Point Plant. The plan has	based upon the requirements of 10 CFR 50.47 and 10	
	been prepared to meet the requirements of 10 CFR	CFR 50 Appendix E, and the guidelines of the U.S.	document basis guidance.
	50.47(b), 10 CFR 50.72, and 10 CFR 50 Appendix E. The purpose of this plan is to define and assign	Nuclear Regulatory Commission (NRC) as established	No added, removed or altered
	authority and responsibility in order to protect the	in NUREG-0654/FEMA-REP-1, Revision 2.	commitments or change of intent.
	health and safety of the public and plant personnel.		
	This plan applies to all plant emergencies which have		
	resulted in, or which increase the risk of the accidental		
	release of radioactive materials to the environment.		
92.	Plans have been developed based upon knowledge of	[CEP – Introduction]	Non-RIE
J	the potential consequences, timing, and release	There are supporting and complementing emergency	Revised description for fleet.
	characteristics of a spectrum of events. Emergency	plans, including those of federal agencies; the states	•
		practice, into a district of the order of th	Updated graphics. ETE contains

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#### **Current Emergency Plan Common Emergency Plan and Site Annex** Change Type Planning Zones have been defined. Figure 1-1 of Florida, New Hampshire, Wisconsin, and detailed plume EPZ map. Ingestion illustrates the Plume Exposure Pathway Emergency Massachusetts; and local government agencies that EPZ map added to annex. support the NextEra sites. These plans contain Planning Zone for the Turkey Point Plant. A key component of this plan is coordination with Federal, coordinated emergency response and preparedness State, and County authorities who contribute to the instructions for declared emergencies. Each plan has overall response effort. This plan outlines Company been prepared and is maintained by its respective responsibilities within the framework of the overall organization, and is coordinated as appropriate with Emergency Response Organization, and provides a the other plans. conceptual basis for the development of the detailed [Annex - Introduction] procedures necessary to implement the plan. Emergency Planning for the PTN station is performed [Figure 1-1 Plume Exposure Pathway Emergency within the following two Emergency Planning Zones Planning Zone (EPZ): Plume Exposure Pathway EPZ – The PTN Plume Exposure EPZ approximates a 10-mile radius around the plant site and is described and illustrated in the station's Evacuation Time Estimate Study report. Ingestion Pathway EPZ – The PTN Ingestion Pathway EPZ approximates a 50-mile radius around the plant site as illustrated below. [Figure 1-1 Plume Exposure Pathway Emergency Planning Zone] 1.4 Concept of Operations [CEP - Introduction] The Emergency Plan defines emergency conditions Non-RIE 93. and delineates the responsibilities and duties of the The NextEra emergency plan and site annexes are The CEP and site annexes align FPL Emergency Response Organization (see Figure formatted using the outline numbering style of with the 16 planning standards of 2-1). The Emergency Plan is concerned with the NUREG-0654 with level of detail NUREG-0654 R2 to explicitly align with the 10 CFR following basic activities, which are discussed in the 50.47(b) planning standards, the requirements of 10 consistent with NUREG-0654 R2 plan in detail: CFR 50 Appendix E, and the elements of NUREGelements. 1) Organization and resources adequate to detect 0654 R2. That formatting provides a direct crossthe presence of an emergency condition, assess reference to the elements of NUREG-0654 R2. the condition, and respond in an appropriate [Annex – Introduction] manner (Chapter 2). This document matches the structure of the NextEra Assignment of an off-normal event to its proper Common Emergency Plan in following the format of emergency classification (Chapter 3). NUREG-0654. It only contains the guidance elements 3) Notification of off-site authorities, as required, and that have site specific information therefore the continuing communications (Chapter 4). numbering may not always be sequential. 4) Gathering and interpreting data to determine appropriate actions (Chapter 5). Assisting governmental agencies in the

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	development of information for the public both in terms of preparatory education and emergency response information (Chapter 6).  6) Maintaining the FPL Emergency Preparedness Program in a state of readiness (Chapter 7).		
94.	Associated with this Emergency Plan are implementing procedures which provide a detailed	[CEP - P.7]	Editorial
	source of pertinent information and data required by the response organization during an emergency.  These procedures are listed in Appendix C.	Table P.7-1 provides a listing, by title, of the common response and maintenance procedures required to implement the emergency plan, and the section(s) of the emergency plan to be implemented by each procedure.	Aligned EPIP list with NUREG-0654 R2 element. No added, removed or altered commitments or change of intent.
		A listing, by title, of the site-specific response and maintenance procedures required to implement the emergency plan is provided in the site annexes.	
		[Annex – P.7]	
		Table P.7-1 provides a listing of the PTN site-specific procedures required to maintain and implement the emergency plan, and the section(s) of the emergency plan implemented by each procedure.	
95.	Off-normal events have been separated into the	[CEP – D.1]	Editorial
	following four classifications: 1) Unusual Event 2) Alert 3) Site Area Emergency 4) General Emergency These four classes represent emergency conditions which trigger activation of emergency procedures. When an emergency is declared in connection with one of these four classes, many individuals assume new titles with special responsibilities.	NextEra has established and maintains a standard emergency classification and emergency action level scheme. The EAL technical basis manual is referenced in the site annexes. The spectrum of postulated emergency events is categorized into the following four (4) emergency classification levels (ECLs):  • Unusual Event  • Alert  • Site Area Emergency  • General Emergency	Wording altered to align with NUREG-0654 R2 element. No added, removed or altered commitments or change of intent.
96.	Each emergency class is characterized by unusual or off-normal plant events detected by Control Room	[CEP – I.3]	Non-RIE
	instrumentation and/or routine or directed surveillance activities.	The ERO monitors plant parameters using information provided by plant data transmittal systems to assess the status of reactor fuel using core damage assessment procedures.  The ERO monitors plant data systems to evaluate the status of containment integrity, systems used to mitigate the release of radioactive material to the	The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		environment and to identify leakage of radioactive	
		material from plant systems, structures, and	
		components.	
		Effluent and process monitors are used to determine	
		the onset and duration of an actual or potential release	
		of radioactive material to the environment.	
97.	The Company's response to an emergency condition		Non-RIE
	consists of an on-shift (immediate) response and an		The CEP and Annexes are
	augmented (expanded) response Emergency		formatted in a 50.47(b) outline.
	Response Organization (ERO) which can readily		Wording removed. Generalized
	adapt to an emergency condition as it develops. The		description now provided in greater
	immediate response phase encompasses the period		detail within the elements to
	of time and sequence of actions associated with the		specifically describe the
	initial detection of an off-normal event, classification as		capability/commitment to the level of
	an emergency, and activation of the ERO, if required.		detail of the NUREG-0654 R2
	During this phase, the Shift Manager assumes		element and fleet description.
	responsibility as the Emergency Coordinator and		olomoni and noot docomption.
	initiates the following general activities:		
	1) Diagnosis of the off-normal event		
	2) Corrective action		
	3) Classification of the off-normal event		
	4) Notification of appropriate off-site authorities		
	5) Notification of appropriate FPL authorities		
	During the expanded response phase, the Emergency		
	Coordinator and Recovery Manager (RM) will assess		
	the situation and, as necessary, expand the		
	Emergency Response Organization. All available		
	company resources can be mobilized as needed during this period. State, County, and Federal		
	Response Organizations can become fully		
	operational, as required. Assessment, protective, and		
	corrective actions will continue during the expanded		
	response phase, as required.		
	Table 1-1 summarizes the sequence of actions taken		
	during the phased response. Figure 1-2 delineates the		
	initial notification flow and Figure 2-2 shows the same		
	for the State and County organizations.		
	As discussed throughout this plan, FPL maintains		
	adequate facilities and equipment for detecting,		
	assessing, and responding to emergencies.		
	Redundant means of communications among key		

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	response participants are maintained. FPL also		
	maintains agreements that will provide for emergency		
	medical, rescue, or fire support on site, if needed. The		
	training program is designed to maintain the		
00	proficiency of the Emergency Response Organization.	IOED DOI	Non DIE
98.	The FPL individual in charge of on-site Emergency response during the immediate and expanded	[CEP – B.2]	Non-RIE
	response during the infriedrate and expanded response phases is the Emergency Coordinator. The senior company official, with responsibility for policy	The Emergency Director ERO position has overall command and control of a declared emergency at a NextEra site.	The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level
	and authority to expend funds, is the Recovery	The Shift Manager is the individual who is on-shift at	of detail of the NUREG-0654 R2
	Manager. The Recovery Manager is also responsible for Emergency Operations Facility activation and operation during the expanded response phase.	all times and assumes the role of Emergency Director upon emergency declaration. As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures,	element and fleet description.
		The Shift Manager maintains overall command and control until relieved.	
		[CEP - B.2.a]	
		The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level.	
		Non-delegable responsibilities include the following:	
		Event declaration	
		ORO and NRC Notification	
		PARs for the general public	
		Emergency Exposure (Dose limits and KI)	
		Approving departures from license conditions per 10 CFR 50.54(x) transition from the Shift Manager to the Site Emergency Director upon transfer of command and control.	
99.	In Miami-Dade County, the individual responsible		Non-RIE
	during emergencies is the County Mayor or designee.		Removed wording regarding ORO
	In Monroe County, the Monroe County Mayor provides		response organization hierarchy.
	direction and control during emergencies. As indicated in the State Plan, "the Governor is		Content not applicable to a NUREG-
	AS mulcaled in the State Plan, the Governor is		0654 R2 licensee related element.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	ultimately responsible for protecting the population of the State from the dangers created by emergencies which are beyond the capabilities of local governments or which are multi-jurisdictional in nature. He will provide for public protection through the assignment of appropriate state resources and agencies". "The Governor has appointed the Director, Division of Emergency Management, as the Governor's Authorized Representative (GAR) to act in his/her behalf, as necessary, during a radiological emergency". During emergencies, all State agencies report to this person.		Descriptions are contained in their respective E-Plans.
100.		[CEP - P.6]	Non-RIE
		Emergency plans developed by other agencies that support the NextEra Common Emergency Plan include the following:  • Department of Homeland Security National Response Framework  • U.S. Nuclear Regulatory Commission Incident Response Plan  Plans for organizations that support individual sites are listed in the site annexes.  [Annex – P.6]  Emergency plans developed by other agencies that	Aligned support plan list with NUREG-0654 R2 element. Removed storage location list from plan. Storage locations are information applicable to maintenance procedures.
	<ul><li>3) Emergency Operations Facility</li><li>4) Corporate Functional Area Manager</li><li>5) Emergency Preparedness Manager (at Turkey Point)</li></ul>	support the PTN emergency plan include the following:  • State of Florida Radiological Emergency Management Plan is the external emergency plans specific to the support of PTN. County Emergency	
ti N	Note: The current State of Florida Radiological Emergency Management Plan is always available on the State of Florida, Division of Emergency Management website at https://www.floridadisaster.org/CEMP/	Plans are contained in the State Emergency Plan.	

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# **Current Emergency Plan**

# **Common Emergency Plan and Site Annex**

# **Change Type**

# 101. [1.5 Supporting Plans and Agreements] Additional material utilized in the preparation of the Turkey Point Plan are:

- 1) NUREG 0654, Rev. 1, FEMA REP.1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in support of Nuclear Power Plants; November, 1980
- 2) NUREG 0578, TMI-2 Lessons Learned Task Force: Status Report and Short-Term Recommendations; July, 1979
- 3) NUREG 0737, Clarification of TMI Action Plan Requirements: November, 1980
- 4) 10 CFR 20, Standards for Protection Against Radiation
- 5) 10 CFR 50, Domestic Licensing of Production and **Utilization Facilities**
- 6) EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents: October, 1991
- 7) Reg. Guide 1.97, Revision 2, Instrumentation for Light-Water-Cooled Nuclear Power Plants to Assess Plant and Environs Conditions During and Following an Accident; December, 1980
- 8) NUREG/BR-0150, Vol. 1, Response Technical Manual (USNRC)
- 9) Nuclear Energy Policy on Exposure Limits for Emergency Response Personnel, Revision to Policy Statement Ltr. No. JNO-HP-94-056, 26 October, 1994
- 10) L-97-290. Proposed Change to Emergency Action Level for RCS Leakage, dated March 31, 1998; and NRC Response Letter, dated August 21, 1998
- 11) NRC Information Bulletin 2005-02, Emergency Preparedness and Response for Security Based **Events**
- 12) Turkey Point Plant, Units 3 and 4 Issuance of Amendments Regarding Steam Generator Alternate Repair Criteria (TAC No's MD1380 and MD1381), issued by the NRC via letter dated November 1, 2006.
- 13) ML093360321 NRC Safety Evaluation Approving

[CEP - Introduction]

The formal NextEra emergency plan for each NextEra site consists of the following program and bases documents:

- NextEra Common Emergency Plan The NextEra constitute the formal emergency common emergency plan identifies and describes plan. the methods for responding to emergencies and maintaining emergency preparedness. Planning efforts common to all NextEra power reactor sites are encompassed within the NextEra common emergency plan.
- Site Emergency Plan Annex The site emergency document are listed in those plan annexes contain information and guidance that is unique to the site. The site annexes are subject to the same review and audit requirements as the common emergency plan.
- Site Emergency Action Level (EAL) Technical Basis Document (TBD) - The EAL TBD establishes the classification scheme used to declare emergencies. The EAL TBD documents references and inputs used to determine values or events that would result in declaration of an emergency. The EAL TBD fulfills requirements of 10 CFR 50 Appendix E.IV.B.1.
- Site On-Shift Staffing Analysis The on-shift staffing analysis documents that the minimum shift crew can perform the actions required by Emergency Operating Procedures (EOP) and the emergency plan, without task overlap or overburden, prior to Emergency Response Organization (ERO) augmentation. The on-shift staffing analysis fulfills requirements of 10 CFR 50 Appendix E.IV.A.9.

Non-RIE

The CEP and Annexes are formatted in a 50.47(b) outline. Added specific list of documents that

CEP Appendix 3 documents a 10 CFR 50 Appendix E.IV Cross Reference.

Regulatory references and guidance specific to a emergency plan basis documents.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
102.	Turkey Point's Emergency Action Levels, 12/14/2009  14) NUREG/CR-7002, Criteria for Development of Evacuation Time Estimate Studies  15) NUREG-0654/FEMA-REP-1, Revision 1, Supplement 3, Guidance for Protective Action Strategies, Date Published: November 2011  16) The Turkey Point Nuclear Power Pant on Shift Staffing Analysis Report, developed in accordance with 10 CFR 50 Appendix E, Section IV, A.9  17) L-2019-203, License Amendment Request 264, Adopt Emergency Action Level (EAL) Scheme described in NEI 99-01, Revision 6, "Development of Emergency Action Levels for Non-Passive Reactors", dated December 6, 2019  18) L-2020-081, Response to Request for Additional Information Regarding License Amendment Request 264, Adopt Emergency Action Level (EAL) Scheme Described in NEI 99-01, Revision 6, "Development of Emergency Action Levels for Non-Passive Reactors", June 12, 2020  19) L-2020-157, Supplement to License Amendment Request 264, Adopt Emergency Action Level (EAL) Scheme Described in NEI 99-01, Revision 6, "Development of Emergency Action Level (EAL) Scheme Described in NEI 99-01, Revision 6, "Development of Emergency Action Levels for Non-Passive Reactors", November 5, 2020	Technical Basis Manual (TBM) – The PAR TBM document the bases used to develop site-specific	Non-RIE
	Detection of Off-Normal Conditions Actions:	A summary of response actions taken at each ECL is as follows:	The CEP and Annexes are formatted in a 50.47(b) outline.
	Individual identifies off-normal condition.	1. Unusual Event (UE)	iomated in a ob. 47 (b) oddine.

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## **Current Emergency Plan**

# Individual immediately notifies Shift Manager.

## Immediate Response Actions:

- Shift Manager diagnoses condition and directs initial corrective action to control or mitigate the condition.
- Shift Manager classifies the condition in accordance with plant procedures. If the condition is classified as an emergency, the Shift Manager through the Emergency Plan becomes the Emergency Coordinator (EC).
- The EC orders mobilization of the Technical Support Center and the Operations Support Center (as required for Alert or higher classification) and confers with the RM for EOF activation.
- EC initiates necessary protective actions for on-site personnel and evaluates the need for Protective Action Recommendations (PARs) for the general public.
- The EC mobilizes on-site emergency response teams, as necessary, to assess and control the emergency.
- EC notifies State and County in accordance with plant procedures.
- EC notifies NRC via Emergency Notification System (ENS) communications link.
- Control Room Communicator notifies plant management.

## Expanded Response (as appropriate) Actions:

- TSC and OSC are staffed and declared operational assuming command and control of
- the emergency. This includes PARs, notifications, and classification.
- RM proceed to the Emergency Operations Facility, as appropriate. RM notifies EC when EOF is operational and assumes responsibility for recommending off-site protective actions and for communications with off-site organizations. The EC can now devote attention to control of the power plant.
- RM (or designated response staff) receives and

**Common Emergency Plan and Site Annex** · Initial and follow-up event notification to the

- OROs and NRC.
- Notification of ERO personnel. This is an information only notification and does not require activation of emergency facilities or response organizations. Any Emergency Response Facility (ERF) may be activated at the discretion of the Emergency Director.

#### 2. Alert

- · Initial and follow-up event notification to the OROs and NRC.
- Augmentation of the shift ERO (refer to Element A.1.a) by activating the Technical Support Center, Operations Support Center and **Emergency Operations Facility.**
- The Joint Information System shall be established at this ECL, with Joint Information Center activation determined in coordination with the offsite agencies.
- · If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.
- 3. Site Area Emergency
  - · Initial and follow-up event notification to the OROs and NRC.
  - Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.
  - The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).
  - Implementation of onsite protective actions (refer to Section J).
  - If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.
  - · Offsite precautionary actions may be recommended under certain conditions (as required by site specific OROs).
- 4. General Emergency
  - Initial and follow-up event notification to the

**Change Type** 

Provided list of typical actions by ECL.

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#	Current Emergency Plan		Change Type
	<ul> <li>assesses periodic plant status, radiological data, and meteorological data, and continues communications and coordination with the State and County authorities.</li> <li>EIM proceeds to the Emergency Operations Facility, as appropriate and establishes communications with the Recovery Manager (RM) and Joint Information Center.</li> <li>RM continues assessment of conditions and control of FPL response until plant conditions stabilize. RM then closes out with a summary to off-site authorities or prepares for further long-term activities.</li> </ul>	The Joint Information System is in operation or Joint Information Center is staffed by NextEra	
103.	[Figure 1-2, Initial Notification]	communication to the office and fitte.	Non-RIE
			The CEP and Annexes are formatted in a 50.47(b) outline. Removed figure. Notification process described in Section E, Notification Methods and
	Organization, Facilities, and Support Services		Procedures.
104.	Organization, Facilities, and Support Services     Elements of the Emergency Response	[CEP – A.1]	Editorial
	Organization] This section defines the primary components of the overall Emergency Response Organization and the relationship of each component to the total effort.	Element A.1.a.1 below provides a summary of NextEra response organization responsibilities as they relate to the overall concept of operations for event response. A detailed description of the NextEra Emergency Response Organization (ERO) is contained in Section B.  The elements below identify the federal, Offsite Response Organizations (OROs), and other organizations that encompass the overall response organization for an event at a NextEra site.	The CEP and Annexes are formatted in a 50.47(b) outline. No added, removed or altered commitments or change of intent.
105.	[2.1.1 Florida Power & Light Company] Florida Power & Light Company (FPL) is the licensed operator of Turkey Point Units 3 and 4. As the licensed operator, FPL has developed this Emergency Plan (and associated implementing procedures) to specify actions and provide a framework for emergency response. FPL's primary responsibilities	CEP – A.1.a] Emergencies are initially declared and responded to by the on-shift staff under the direction of the Shift Manager. Augmentation of the shift ERO is required at the Alert emergency classification level or higher, and discretionary at the Unusual Event emergency classification level. The ERO has the capability to	Non-RIE Altered content to encompass applicable detail from each NextEra site.

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#### **Current Emergency Plan Common Emergency Plan and Site Annex Change Type** include the following: expand or contract to meet the needs of the 1) Diagnosis and corrective action emergency. 2) Emergency classification When the emergency response facilities are staffed 3) Notification of appropriate governmental response the augmenting ERO relieves the on-shift personnel of emergency response functions not directly associated organizations and continuing communication 4) Initiation of protective actions for employees and with unit operations. NextEra overall responsibilities others on site for event response are as follows: Recognize, classify and declare an emergency. 5) Recommendation of protective actions for the Notify appropriate NextEra personnel, federal, and public 6) Mobilization of the Florida Power & Light OROs. Request additional support from federal, ORO, and Company Emergency Response Organization 7) Continuing data collection, dose projection, and private organizations. assessment actions Establish and maintain effective communications 8) Owner Controlled Area Recovery and re-entry with onsite and offsite entities. Continuously assess the consequences of the The Florida Power & Light Company Emergency accident, and periodically communicate response Response Organization (ERO) is described in detail in status and assessment information to the Section 2.2 and illustrated in Figure 2-1. appropriate groups and authorities. Take protective actions onsite and recommend protective actions to offsite authorities. Monitor and control radiation exposure of personnel responding during an emergency. In conjunction with OROs, provide emergency information to the media and public through periodic media briefings and media statements. [2.1.2 State of Florida Emergency Response 106. [Annex – A.1.a] Editorial The principle state agencies having planning and Organization] Removed state related ORO figures. Figure 2-2a illustrates the State of Florida's implementation responsibilities for emergencies Updated agency descriptions. Emergency Response Organization before an for PTN are: No added, removed or altered Executive Order by the Governor. Figure 2-2b State of Florida Division of Emergency commitments or change of intent. illustrates the State of Florida's Emergency Response Management (DEM) Organization after Executive Order by the Governor. DEM is the state agency authorized to receive initial notification from Florida Power & Light State of Florida Division of Emergency Management The Division of Emergency Management (DEM) is the Company and is responsible for mobilizing the state agency authorized to receive initial notification state and local emergency response agencies. from Florida Power & Light Company and is Specific discussion on transportation of state responsible for mobilizing the state and local emergency response personnel to the vicinity of emergency response agencies. Specific discussion on the plant is discussed in the state plan. This transportation of state emergency response personnel emergency response is conducted in accordance to the vicinity of the plant is discussed in the State with the Florida Radiological Emergency Plan. This emergency response is conducted in Management Plan for Nuclear Power Plants,

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# **Current Emergency Plan** accordance with the Florida Radiological Emergency

prepared by the DEM in coordination with other Management Plan for Nuclear Power Plants, prepared emergency response agencies. The DEM's responsibilities include:

**Common Emergency Plan and Site Annex** 

include: 1) Overall responsibility for coordinating the development and implementation of State and County emergency response plans

by the DEM in coordination with other emergency

response agencies. The DEM's responsibilities

- 2) Command and control of State emergency response resources
- 3) Notification of State and County response agencies
- 4) Coordination among State, Federal (i.e., FEMA, EPA, DOE) and Local agencies

### Florida Health

The Florida Health (FH) is the State agency authorized to provide technical support and expertise in Public Health matters. The FH defined responsibilities include:

- 1) Emergency medical services, public health, and sanitation
- 2) Economic and social services Through the Bureau of Radiation Control (BRC):
- 3) Radiological monitoring off site
- 4) Off-site radiological exposure control and protective response recommendations for off-site areas

Division of Florida Highway Patrol, Department of Highway Safety and Motor Vehicles

The Florida Highway Patrol, through the coordination of the Department of Law Enforcement, provides the following services:

- 1) Traffic control
- 2) Communications (support)
- 3) Law enforcement coordination
- 4) Upon request, assist in the transportation of samples for analysis when immediate analysis is necessary.
- 5) Within their authority, evacuate and exclude individuals from designated public areas.

These services will be provided in accordance with the

- 1) Overall responsibility for coordinating the
- development and implementation of State and County emergency response plans

**Change Type** 

- 2) Command and control of State emergency response resources
- 3) Notification of State and County response agencies
- 4) Coordination among State, Federal (i.e., FEMA, EPA. DOE) and Local agencies

The DEM can request support, as necessary, from other state agencies as defined in the State Plan.

### Florida Health (FH)

FH is the state agency authorized to provide technical support and expertise in Public Health matters. The FH defined responsibilities include:

- 1) Emergency medical services, public health, and sanitation
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- 3) Law enforcement coordination
- 4) Upon request, assist in the transportation of samples for analysis when immediate analysis is necessary.
- 5) Within their authority, evacuate and exclude individuals from designated public areas.

These services will be provided in accordance with

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	State Plan. Other State Agencies	the State Plan.	
	The DEM can request support, as necessary, from other State agencies as defined in the State Plan.		
107.	[2.1.3 County Response Organizations]	[Annex – A.1.a]	Editorial
	Counties that fall within the plume exposure EPZ include Miami-Dade County and Monroe County. Counties that fall within the ingestion pathway EPZ include Miami-Dade County, Monroe County, Broward County, and Collier County.  The local organizations are described in the State Plan. Counties may have responsibilities with respect to plume exposure risk response, hosting of evacuees, and ingestion pathway protection. Miami-Dade and Monroe Counties have responsibilities with respect to risk, hosting and ingestion pathway. Collier and Broward Counties have responsibility for ingestion pathway.  The State Plan addresses short term actions required in the plume exposure pathway EPZ. The State Plan also addresses the ingestion pathway EPZ. State agencies take the lead in controlling ingestion pathway response. The State Plan also establishes procedures to protect citizens of Miami-Dade and Monroe Counties and visitors to these counties from the effect of an accident at the Turkey Point plant. The State Plan includes the Miami-Dade and Monroe Counties' Radiological Emergency Organizations.  The State Plan also includes host plans for Miami-Dade County and Monroe County, respectively. The Miami-Dade Mayor and the Monroe County Mayor will take proper and responsible action to protect life, health, safety, property, and the environment from the consequences of nuclear power plant accidents. During radiological emergencies, resources, and personnel of Miami-Dade and Monroe Counties will be reserved and available for use by the County Mayors.  The decision to implement protective action recommendations will be made jointly by the Miami-	B. County Response Organizations The Miami-Dade County and Monroe County Plans are a part of the State Plan. The State Plan includes the Miami-Dade and Monroe Counties' Radiological Emergency Organizations. The State Plan also includes host plans for Miami-Dade County and Monroe County, respectively. The local organizations are described in the State Plan. Counties may have responsibilities with respect to plume exposure risk response, hosting of evacuees, and ingestion pathway protection. Miami-Dade and Monroe Counties have responsibilities with respect to risk, hosting and ingestion pathway. Collier and Broward Counties have responsibility for ingestion pathway. The State Plan addresses short term actions	Updated county agency descriptions. Support agency under LOA moved to appropriate section. No added, removed or altered commitments or change of intent.

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## **Current Emergency Plan**

Dade County Mayor (or designee), Monroe County Mayor and either the Governor or authorized representative (State Director, Division of Emergency Management). If time does not permit State involvement in initial decision making, the decision to take protective actions may be made by the Miami-Dade County Mayor and Monroe County Mayor, or their designated alternates. All county personnel and resources will be under the control of the County Mayors. Federal and State resources will also be available to the counties.

Alerting, warning, and evacuation of populations will be in accordance with procedures prescribed in the State Plan. The State Plan also describes hosting responsibilities, including shelter location and operation, and evacuee registration, monitoring, and decontamination.

Responsibility for direction and control rests with the Miami-Dade County Mayor and Monroe County Mayor, unless a disaster declaration under provisions of Florida Statues. Chapter 252 is in effect. If a disaster has been declared, responsibility for direction and control rests with the Governor or authorized representative.

The Miami-Dade County Office of Emergency Management reports to the Miami-Dade County Mayor, and the Monroe County Emergency Management Department to the Monroe County Mayor. This is also true for other county resources, including the County Manager, Sheriffs' Offices. Engineers' Offices, fire departments, public health offices, school boards, and other county organizations.

The Monroe County Mayor and Miami-Dade County Mayor (or designee) have responsibility for overall emergency response planning. County Emergency Response Directors are responsible for actual plan development and updating. Miami-Dade County and Monroe County each have an Emergency Operations Center.

Miami-Dade County Office of Emergency

of Emergency Management). If time does not permit State involvement in initial decision making, the decision to take protective actions may be made by the Miami-Dade County Mayor and Monroe County Mayor, or their designated

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alternates. All county personnel and resources will be under the control of the County Mayors. Federal and State resources will also be available to the counties.

Alerting, warning, and evacuation of populations will be in accordance with procedures prescribed in the State Plan. The State Plan also describes hosting responsibilities, including shelter location and operation, and evacuee registration, monitoring, and decontamination.

Responsibility for direction and control rests with the Miami-Dade County Mayor and Monroe County Mayor, unless a disaster declaration under provisions of Florida Statues, Chapter 252 is in effect. If a disaster has been declared, responsibility for direction and control rests with the Governor or authorized representative.

The Miami-Dade County Office of Emergency Management reports to the Miami-Dade County Mayor, and the Monroe County Emergency Management Department to the Monroe County Mayor. This is also true for other county resources. including the County Manager, Sheriffs' Offices, Engineers' Offices, fire departments, public health offices, school boards, and other county organizations.

The Monroe County Mayor (or designee) and Miami-Dade County Mayor (or designee) have responsibility for overall emergency response planning. County Emergency Response Directors are responsible for actual plan development and updating. Miami-Dade County and Monroe County each have an Emergency Operations Center.

Miami-Dade County Office of Emergency Management (OEM) and Monroe County OEM The county emergency response directors (Monroe Page 37 of 134

# **Current Emergency Plan**

# Management and Monroe County Office of **Emergency Management Department Directors** The county Emergency Response Directors (Monroe and Miami-Dade County) receive initial notification from Florida Power & Light Company simultaneously with the DEM via the Hot Ring Down System or individually by DEM via other alternate communications for all four classes of emergency. They then have responsibility for initiating any necessary off-site protective actions (including evacuation of off-site areas) based upon available information from the FPL Emergency Coordinator or Recovery Manager, and Florida Health Bureau of Radiation Control. The Miami-Dade County and Monroe County Plans are a part of the State Plan. Through established mutual aid agreements in Fire, Law Enforcement, and Emergency Management, Miami-Dade and Monroe county can supplement resources for responding to a nuclear power plant event (including hostile action based events). In addition to overall responsibility, the Emergency Response Directors have responsibility for the following:

- 1) Direction and control of County emergency
- 2) Protective response for off-site areas including warning and evacuation
- 3) Communications
- 4) Public information
- 5) Off-site radiological exposure control
- 6) Coordination of arrangements for shelter and feeding of evacuees

# Miami-Dade County Public Safety Department and Monroe County Sheriff

At the request of the respective Emergency Response Directors, the Miami-Dade County Public Safety Department or the Monroe County Sheriff can provide the following support services:

- 1) Law enforcement (including hostile action based events)
- Warning and evacuation (implementation)

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**Change Type** 

and Miami-Dade County) and DEM receive initial notification from PTN simultaneously via electronic transmittal of the notification form and verbal verification of receipt by telephone, or individually from DEM via other alternate communications for all four classes of emergency. They have overall responsibility for initiating any necessary off-site protective actions (including evacuation of off-site areas) based upon available information from the PTN Emergency Director and FHBRC. In addition to overall responsibility, the Emergency Response Directors have responsibility for the following functions:

- 1) Direction and control of County emergency resources
- 2) Protective response for off-site areas including warning and evacuation
- 3) Communications
- 4) Public information
- 5) Off-site radiological exposure control
- 6) Coordination of arrangements for shelter and feeding of evacuees

Through established mutual aid agreements in Fire, Law Enforcement, and Emergency Management, Miami-Dade and Monroe county can supplement resources for responding to a nuclear power plant event (including hostile action based events).

# Miami-Dade County Public Safety Department and Monroe County Sheriff

At the request of the respective Emergency Response Directors, the Miami-Dade County Public Safety Department or the Monroe County Sheriff can provide the following support services:

- 1) Law enforcement (including hostile action based events)
- 2) Warning and evacuation (implementation)
- 3) Traffic control
- 4) Communications (support)
- 5) Rescue (support)

# Other Local Agencies

As defined in the county plans, the Emergency

provided out of DOE's Savannah River Operations

#### **Current Emergency Plan Common Emergency Plan and Site Annex Change Type** Traffic control Response Directors can request support as 4) Communications (support) necessary from the following: 5) Rescue (support) 1) Department of Fire and Rescue 2) Department of Public Health Other Local Agencies 3) Public Works/General Services Administration As defined in the County plans, the Emergency 4) Metro Transit Agency (Miami-Dade County) Response Directors can request support as necessary 5) American Red Cross from the following: The counties within the 50-mile EPZ (ingestion 1) Department of Fire and Rescue exposure pathway) of PTN are: 2) Department of Public Health **Broward County** 3) Public Works/General Services Administration Collier County 4) Metro Transit Agency (Miami-Dade County) Miami-Dade County 5) American Red Cross Monroe County Miami-Dade Fire Rescue The Miami-Dade County Fire Department, by agreement with Florida Power & Light Company (Appendix B) will respond to fires and support for hostile action based events on site upon request. [2.1.4 Federal Response Agencies] [CEP - A.1.a] Non-RIE U. S. Nuclear Regulatory Commission 2. Federal Organizations Removed specific detail of federal The Nuclear Regulatory Commission (NRC) will be Control, responsibility and interface of federal organizations contained in their notified via a direct, dedicated telephone line (ENS organizations is governed by the National respective plans and replaced with hotline) or designated alternate communications Response Framework (NRF) and the description of their organization's immediately after notification of the appropriate state Nuclear/Radiological Incident Annex to the NRF coordination for response to nuclear or local agencies and not later than one hour after the when they are called to respond to an event at a utility. licensee declares one of the Emergency nuclear power plant. The NRC acts as the lead federal agency with regard to technical matters Classifications. NRC is responsible for the coordination of the Federal Government's technical during a nuclear incident, including providing response activities. radiological assistance. U. S. Coast Guard At the request of Florida Power & Light Company (onsite activities) and the DEM (off-site activities), the Coast Guard can provide rescue assistance and hostile action based event support in accordance with their general authority as described in Appendix B. U. S. Department of Energy (DOE) Upon request by the Florida Health Bureau of Radiation Control. DEM can request that the DOE provide a Radiological Assistance Team to aid in evaluating radiological hazards. This support would be

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
109.	Office, Aiken, South Carolina. This provision is described in the State Plan. DOE is responsible for coordinating the off-site radiological monitoring and evaluation activities of the Federal Government.  Federal Emergency Management Agency (FEMA) FEMA has the responsibility for coordinating all nontechnical response activities of the Federal Government off site. They serve as the primary point of contact for requests for federal assistance from State and Local officials and other federal agencies.  [2.1.5 Private Sector Organization] Institute of Nuclear Power Operations (INPO) INPO maintains industry source lists for personnel and equipment which can be made available for support	[CEP – B.5]  1. Institute of Nuclear Power Operations (INPO) INPO has an emergency response plan that enables it to provide the assistance in locating	Editorial Updated company descriptions. No added, removed or altered
	services during an emergency. A letter of support has been provided in Appendix B.  Bechtel Power Corporation Bechtel was the Architect/Engineer for the building and early operation of the Turkey Point Nuclear Plant. Upon request, Bechtel can supply emergency technical services and resources as provided by the Letter of Agreement listed in Appendix B.  United E&C (formerly URS) United E&C, is an Architectural/Engineering organization in the nuclear industry. Upon request, they can supply emergency technical services as described in Appendix B.  Framatome (formerly AREVA) Framatome is a nuclear services company that can provide engineering and technical support as detailed in the Letter of Agreement listed in Appendix B.	sources of emergency personnel, equipment, and operational analysis.  [Annex – B.5]  2. Other External (non-NextEra) Support Organizations  A. Bechtel Power Corporation: Bechtel was the Architect/Engineer for the building and early operation of PTN. Upon request, Bechtel can supply emergency technical services and resources.  B. Framatome: Framatome is a nuclear services company that can provide engineering and technical support.  C. United E&C: United E&C is an Architectural/Engineering organization in the nuclear industry. Upon request, they can supply emergency technical services.	commitments or change of intent.
110.	[2.2 Florida Power & Light Company Emergency		Non-RIE
	Response Organization] The purpose of this section is to describe FPL's		The CEP and Annexes are formatted in a 50.47(b) outline.
	Emergency Response Organization and resources. The Emergency Response Organization (ERO) is defined relative to the two phases of response and actions which are anticipated. This approach recognizes that the organization will be a dynamic one, dependent upon response time and the severity		Section purpose descriptions replaced with planning standard wording.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	of the emergency. The on-shift response consists of shift operators, the plant duty shift and other trained plant personnel as available who are responsible for diagnosing the emergency and taking corrective actions. Along with the required shift operations personnel, the expanded response includes personnel necessary to man the TSC, OSC, and EOF. Figure 2-4 shows the resources associated with the on-shift response phase. The ERO includes plant and corporate personnel which are available as the emergency warrants, to assist in assessment actions, control, and stabilization.		
111.		[CEP - B.1.a]	Non-RIE
	The normal operating organization chart for Turkey Point Units 3 and 4 is shown on Figure 2-3. The plant is staffed and qualified to take the necessary actions to implement the Emergency Plan and to initiate the immediate response actions necessary. The normal hours plant staff consists of approximately 600 people. Key operating positions are described on Figure 2-3.	A description of the normal site operating organization is contained in each sites' UFSAR (typically Chapter 13).  The requirements for on-shift operations staff, security force staff, and fire brigade/first aid staff are controlled by Technical Specifications and other licensing and administrative documents. Positions from these departments are described in the emergency plan only when assigned an emergency propagations function.	

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	The Assistant Operations Manager reports directly to		
	the Operations Site Director.		
	Shift Manager		
	The Shift Manager is responsible for the actual		
	operation of the nuclear plant and fuel handling		
	operations. The Shift Manager directs the activities of		
	assigned personnel and is cognizant of maintenance		
	activity being performed while on duty. The Shift		
	Manager reports directly to the Assistant Operations		
	Manager.		
	Unit Supervisor		
	The Unit Supervisor is responsible for assisting the		
	Shift Manager in the administrative functions		
	associated in operating the nuclear units. The Unit		
	Supervisor is responsible for the actual operation of		
	the nuclear plant and fuel handling operations when		
	the Shift Manager is absent from the Control Room.		
	The Unit Supervisor reports directly to the Shift		
	Manager.		
	Field Supervisor		
	The Field Supervisor is the working operating foreman		
	assigned for each shift. The Field Supervisor reports		
	directly to the Unit Supervisor.		
	Radiation Protection Manager		
	The Radiation Protection Manager manages the		
	Radiation Protection Department and is responsible		
	for implementing and maintaining the plant radiation		
	protection program. The Radiation Protection Manager	r	
	manages overall laboratory operation and ensures		
	that Radiation Protection training, record keeping, and		
	reporting requirements are met.		
	Chemistry Manager		
	The Chemistry Manager manages the Chemistry		
	Department and is responsible for implementing and		
	maintaining the plant chemistry program and for		
	chemical and radiochemical monitoring, analysis, and		
	evolution.		
	Engineering Site Director		
	The Engineering Site Director manages Reactor		
	Engineering, discipline engineers, and other general		
	plant engineers and technicians.		

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Maintenance Site Director The Maintenance Site Director manages the Electrical, Mechanical, and Instrument and Control (I&C) Departments and is responsible for the maintenance of mechanical, electrical, and I&C equipment in the nuclear units.		Change Type
	Quality Manager The Quality Manager manages the Quality Control/Quality Assurance Department. The Quality Manager is responsible for directing the activities of the QC Inspectors who perform surveillance and inspection of nuclear safety related activities to monitor for technical specification and regulatory compliance. Site Functional Area Manager (SFAM) - Emergency Preparedness Site Emergency Preparedness Manager who manages the Emergency Preparedness Program at the station. Onsite Review Group (ORG) or management designate meeting The ORG functions to advise the Site Vice President on all matters related to nuclear safety. Specific responsibilities of the ORG are identified in the Updated Final Safety Analysis Report (UFSAR).		
112.	[2.2.2 Emergency Response Organization] The Emergency Plan is structured so that normal company operations are not significantly disrupted. Personnel are designated as part of the Emergency Response Organization and arrangements are made	[CEP – Planning Standard B] B: Emergency Response Organization On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Previous general content aligned with planning standard.
113.	[2.2.2.1 On-Shift Response Phase] Initiating Event (Unusual Event, Alert, Site Area Emergency or General Emergency) The emergency response is initiated by any individual who discovers an initiating condition. This person	ато эроспоч.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Content describing analysis of off-

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#	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
	notifies the Shift Manager by the fastest means possible. This first phase is characterized by diagnosis and immediate action by the plant operators on shift to place the plant in a safe and stable condition.		normal conditions is included in the EAL TBD.
114.	[2.2.2.1 On-Shift Response Phase]	[CEP - D.2]	Non-RIE
	provided initially by shift operators and the plant duty staff. Figure 2-4 shows the On-shift Emergency Response Organization.	NextEra has and maintains the capability to assess, classify, and declare an emergency condition within 15 minutes after the availability of indications to plant operators that an EAL threshold has been met or exceeded. Details for classification timeliness criteria are documented in the site specific EAL Technical Bases Document.  [CEP – D.3]  Emergency Operating Procedures provide instructions to Control Room personnel to assist in mitigating the consequences of a broad range of accidents and multiple equipment failures. These procedures are based on guidelines developed by the owners' groups.  [CEP – B.2]  The Emergency Director ERO position has overall command and control of a declared emergency at a NextEra site.  The Shift Manager is the individual who is on-shift at all times and assumes the role of Emergency Director upon emergency declaration. As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures,  The Shift Manager maintains overall command and control until relieved.	Content expanded to provide detail consistent with the criteria of NUREG-0654 R2.
115.	[2.2.2.1 On-Shift Response Phase]	[CEP – B.2.a]	Non-RIE
	Line of Succession The line of succession in the Control Room for the position of Emergency Coordinator should the Shift Manager be incapacitated is as follows (in order of succession):  1) Unit Supervisor	The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level.	Relief of sick or incapacitated watch- standers is governed by technical specifications. Line of succession clarified to provide detail consistent with the criteria of NUREG-0654 R2.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	2) Any other member of the plant staff with an active Senior Reactor Operator license It is the responsibility of the new Emergency Coordinator to ascertain the status of all Emergency Coordinator responsibilities. When the EC function is transferred to higher level plant management, the EC may serve the function from the TSC. The Emergency Coordinator can grant permission for watch relief, including the EC functions, when the EC judges it safe to do so. Following a proper turnover, the duties of the Emergency Coordinator may be assumed by a qualified member of the Plant Management staff.		
116.	<ul> <li>[2.2.2.1 On-Shift Response Phase]</li> <li>Actions</li> <li>The Emergency Coordinator initiates the following actions per plant procedures and uses judgment to:</li> <li>1) Order corrective actions to bring the emergency under control.</li> <li>2) Mobilize the Emergency Response Organization.</li> <li>3) Notify the State Division of Emergency Management State Watch Office Duty Officer and the County Emergency Response Directors in accordance with plant procedures.</li> <li>4) Provide recommendations for off-site protective actions as discussed in Section 5.</li> <li>5) Notify NRC via ENS immediately after notification of the appropriate state or local agencies and not later than one hour after the licensee declares one of the Emergency Classifications.</li> <li>6) Implement Severe Accident Management Guidance (SAMGs) as required.</li> </ul>	<ul> <li>[CEP B.1.a.1]</li> <li>A. Shift Manager</li> <li>Organizational Interface and Coordination</li> <li>Command and Control</li> <li>Facility/Group Management and Supervision</li> <li>Contact and Use of External Support Services</li> <li>Use of Medical, Fire and Law Enforcement Support</li> <li>NRC Notification and Communications</li> <li>Event Classification</li> <li>ERO Notification</li> <li>State and Local Event Notification</li> <li>ERF Communications</li> <li>Accident Detection and Assessment</li> <li>Effluent Release and Dose Assessment</li> <li>OSC Team Priorities, Dispatch and Control</li> <li>Site Assembly and Accountability</li> <li>Site Evacuation</li> <li>ERO Radiological Protection</li> <li>Offsite Protective Action Recommendations</li> <li>Emergency Exposure</li> </ul>	Non-RIE ERO function and task hierarchy updated consistent with current NRC and industry guidance. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
117.	[2.2.2.1 On-Shift Response Phase]  Delegation The Emergency Coordinator shall not delegate the following responsibilities:	First Aid     Event Termination  [CEP – B.2.a]  Non-delegable responsibilities include the following:     Event declaration     ORO and NRC Notification	Non-RIE CEP limits command and control and non-delegable functions to the SM and SED.

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#### **Current Emergency Plan Common Emergency Plan and Site Annex Change Type** Classification PARs for the general public Refer to Analysis #1 and Analysis 2) Decision to notify Federal, State and Local Emergency Exposure (Dose limits and KI) #2 for a detailed comparison authorities Approving departures from license conditions per 10 evaluation of the ERO positions. 3) Recommendation of protective actions for the CFR 50.54(x) transition from the Shift Manager to the functions/tasks of the CEP. public (off site) Site Emergency Director upon transfer of command The Emergency Coordinator may delegate other and control. responsibilities. Note: The Recovery Manager assumes the responsibility for notifying Federal, State and Local authorities and recommending protective actions when the EOF is staffed and operational. [2.2.2.1 On-Shift Response Phase] [CEP - B.1.a] Non-RIE Plant Staff Emergency Assignments The requirements for on-shift operations staff, security The CEP and Annexes are force staff, and fire brigade/first aid staff are controlled formatted in a 50.47(b) outline. A. On-Shift Emergency Response Organization by Technical Specifications and other licensing and Relief of watch-standers is governed 1) The On-shift Emergency Response administrative documents. Positions from these by technical specifications. Relief of Organization is composed of operators, the departments are described in the emergency plan only ERO positions is by another plant duty staff, and other trained ERO when assigned an emergency preparedness function dualified ERO member. personnel on shift. All are qualified in that is performed during an emergency. procedures and practices required for Site specific on-shift staffing analysis reports are performing specific duties as ERO members. developed in accordance with 10 CFR 50 Appendix The On-shift Emergency Response E.IV.A.9 and NEI 10-05. The site specific on-shift Organization takes action until the emergency staffing analysis reports are maintained as part of the condition is mitigated or until relieved. site emergency plans and are referenced in the site 2) Members of the On-shift Emergency annexes. Response Organization may be relieved only upon the specific instructions of the EC or appropriate facility supervisor. Merely knowing that a superior is present does not constitute a release from emergency duties and responsibilities. 3) The Turkey Point Nuclear Plant On-Shift Staffing Analysis Report, Reference# 16 Page 1-11, developed in accordance with 10 CFR 50 Appendix E, Section IV, A.9., shows that the on-shift Emergency Response Organization is not assigned responsibilities that would prevent the timely performance of its assigned functions as specified in the Emergency Plan. Table 2-2a of the Turkey Point Radiological Emergency Plan denotes

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	the on-shift staffing.		
119.	[2.2.2.1 On-Shift Response Phase]  B. Emergency Response Organization  1) The Expanded Emergency Response Organization is composed of Operations personnel and ERO personnel to staff the TSC, OSC and EOF, as necessary.	See Analysis #1 and Analysis #2	Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
	With the knowledge of the appropriate facility supervisor, alternate ERO members may be relieved by a counterpart on the On-shift Emergency Response Organization.		
120.	[2.2.2.1 On-Shift Response Phase]	See Table B-1	Non-RIE
	C. <u>Functional Areas of Emergency Activity</u> 1) Plant Systems Operations and Assessments of		The CEP and Annexes are formatted in a 50.47(b) outline.
	Operational Aspects The Shift Manager on duty becomes the Emergency Coordinator in the event of an emergency. The Shift Manager may be relieved as the Emergency Coordinator by another member of the plant management staff trained as Emergency Coordinator. The normal alternate is the Unit Supervisor. The Shift Manager and Unit Supervisor positions are constantly manned. The Emergency Coordinator initially supervises the operations of the plant systems and controls the actions of emergency teams.  2) Emergency Direction and Control Emergency Coordinator as previously discussed.  3) Notification and Communication Emergency Coordinator as previously discussed.  4) Radiological Accident Assessment and In-Plant Protective Actions The primary TSC Radiation Protection Supervisor is the Radiation Protection		Table B-1 lists the functional areas and their key activities, and lists the ERO positions (on-shift and augmenting responders) for those functions.
	Plant Protective Actions The primary TSC Radiation Protection		

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# C		Common Emergency Plan and Site Annex	Change Type
	technicians under the orders of the		
	Emergency Coordinator. A Radiation		
	Protection representative, on site, is		
	designated as the On-Shift TSC Radiation		
	Protection Supervisor. The TSC Radiation		
	Protection Supervisor recommends		
	appropriate protective actions to the EC when		
	not covered by procedure.		
	5) Plant System Engineering, Repair, Corrective		
	Actions, and Support of Operational Accident		
	Assessment		
	The Shift Technical Advisor will provide the		
	initial technical support necessary for repair,		
	corrective actions, and operational accident		
	assessment.		
	6) Fire fighting		
	The Fire Brigade provides first line response		
	to a fire on site. The Fire Brigade is under the		
	direction of the Fire Brigade Leader. The Plant		
	Fire Brigade and Miami-Dade County Fire		
	Department are available to respond to fires on site if requested.		
	7) Rescue Operations and First Aid		
	a) Rescue operations will involve the First		
	Aid Team, as necessary. Under the		
	control of the EC and TSC Radiation		
	Protection Supervisor, entry to potentially		
	hazardous areas will be made by the First		
	Aid Team. Upon notification of the injury,		
	the team will respond in accordance with		
	instructions from the Emergency		
	Coordinator.		
	b) The First Aid responder is a trained		
	qualified medical responder. Typically the		
	medical responder is assigned to the on-		
	site Medical Clinic which is staffed 24		
	hours a day, seven days a week. Any first		
	aid trained employee could render first aid		
	until the medical responder arrives.		
	Site Access Control and Personnel		
	Accountability		

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#		Common Emergency Plan and Site Annex	Change Type
	A member of the Security Department will act as the TSC Security Supervisor. Personnel control and accountability are the responsibility of the Security Force. Security will notify the EC of any unaccounted for personnel. It is estimated that personnel accountability can be accomplished within 30 minutes of declaration of an evacuation [by the EC]. Notification of occupants in the Owner Controlled Area, outside the Protected Area, will be accomplished by security sweeps.  9) Repair and Damage Control Repair and damage control will be performed by assigned teams. These teams may be composed of members from any plant disciplines and may be augmented by other plant staff and non-Florida Power and Light company support personnel. Under the direction of the Emergency Coordinator or designee, these teams are used to mitigate the consequences of the accident and to help restore the normal operation of the plant. Actions include the movement and set-up of portable shielding, tools, emergency equipment, and the operation of plant systems.		
121.	[2.2.2.2 Expanded Response Phase]	[CEP – E.1]	Non-RIE
	Initiating Action This phase is initiated by the Emergency Coordinator (EC). Notification by the EC provides the basis for mobilization of the Florida Power & Light Company Emergency Response Organization (ERO) as well as State, Local, and Federal Emergency Response Organizations. Activation of FPL personnel proceeds to the degree necessary, as determined by the EC in response to the severity of the emergency. Notification of any emergency as defined by this plan will be made to the Recovery Manager (RM) by the EC or a	ERO Notification     The Emergency Director will direct or perform notification of the ERO for all emergency classification levels. ERO personnel report to their assigned emergency response facilities as directed. In the event of a security threat, personnel may be instructed to respond to alternative facilities, or seek cover if on-site.  The means for alerting and notifying ERO members are described in Element F.1.c.  ORDO Front Notifications.	Notification of ERO, ORO and NRC expanded to provide detail consistent with the criteria of NUREG-0654 R2.
	designee. Figure 2-5 shows the response organization that can	ORO Event Notification     NextEra, in cooperation with the OROs, has	

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#	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
	develop during this period.	established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes are made to PARs, a notification to the OROs is made within 15 minutes.	
		Receipt location of notification messages is site specific. ORO notification locations are described in the site annexes.	
		3. NRC Event Notification  NextEra will notify the NRC using ENS as soon as possible after notification of the OROs, and not later than 60 minutes after event declaration.	
		An accelerated call to the NRC will be made immediately after notification of local law enforcement agencies (LLEAs), or within about 15 minutes of the recognition of the security-based threat (discovery of an imminent threat or attack against the site), to ensure the NRC is notified of safeguards events. The information provided in the accelerated NRC notification will be limited to the following:	
		<ul> <li>Site name.</li> <li>ECL if determined prior to the accelerated notification.</li> </ul>	
122.	[2.2.2.2 Expanded Response Phase]  Recovery Manager (RM)  The RM is the Vice President, Turkey Point Plant, or a designated Senior Manager who has knowledge of nuclear plant operations and design. The Recovery Manager will be responsible for activating the EOF responders and directing the Company's Expanded Emergency Response Organization in conjunction with the EC. The RM has the authority to establish policy and to expend funds necessary to cope with any emergency situations that arise. Specific responsibilities for the RM include the following:  1) To periodically inform the Emergency Information of the on-site status and immediately of any significant	Nature of the threat and the attack status.  See Analysis #1 and Analysis #2	Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

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# Current Emergency Plan		Common Emergency Plan and Site Annex	Change Type
changes.			
2) To provide support and data as no	ecessary to the		
Emergency Coordinator.	-		
3) To obtain information on diagnosi	s and prognosis of		
the emergency, estimates of radioac			
prevailing meteorological conditions,	projected		
radiological exposures, and recomm	ended off-site		
protective actions.			
4) To assume from the EC, the resp	onsibility for		
communicating such information to a			
with the State and County response	organizations and		
the issuance of PARs for the public.			
5) To assure continuity of technical a	and administrative		
support, and material resources.			
6) To request additional support for I	FPL and others as		
necessary.			
7) To provide logistical support for el	mergency		
personnel (e.g., transportation, comr	munications,		
temporary quarters, food, water, san	itary facilities in		
the field, and procurement of special	equipment and		
supplies).			
Emergency Information Manager (El	<u>M)</u>		
The EIM will be a designated compa			
designated member of the Corporate			
Department experienced in dissemir			
to the public via the news media. The			
from the Emergency Operations Fac			
EIM will have the following responsit			
<ol> <li>To act as principal public spokes</li> </ol>			
2) To disseminate available information			
Recovery Manager (RM) to the r	news media and		
to provide periodic updates			
3) To work with Federal, State, and			
information representatives to ef	fect joint releases		
and public appearances			
Emergency Security Manager (ESM			
The ESM will be a Company supervi			
with security experience and will be			
RM for providing liaison with county	law enforcement		
and rescue agencies.			
Emergency Technical Manager (ETN	<u>M)</u>		

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<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
The ETM is a manager or senior engineer with detailed knowledge of nuclear plant operations and design and will be responsible for providing technical support and information regarding engineering design for the plant.		
[2.2.2.2 Expanded Response Phase]  Augmented Staff Support  Additional staff support can be provided during this phase to augment the operating staff on site and off site. The EC and the RM will have access to this support through the Emergency Response Directory maintained by the Emergency Preparedness Coordinator.		Non-RIE Removed reference to ERO staffing not described in the emergency plan consistent with the criteria of NUREG-0654 R2.
Lines of Succession Lines of succession for the RM and Managers of the Expanded Emergency Organization are controlled by procedures.	[CEP – B.2.a] The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level.	Non-RIE Line of succession clarified to provide detail consistent with the criteria of NUREG-0654 R2.
Delegation Delegation authority is controlled by procedure.	<ul> <li>[CEP – B.2.a]</li> <li>Non-delegable responsibilities include the following:</li> <li>Event declaration</li> <li>ORO and NRC Notification</li> <li>PARs for the general public</li> <li>Emergency Exposure (Dose limits and KI)</li> <li>Approving departures from license conditions per 10</li> <li>CFR 50.54(x) transition from the Shift Manager to the Site Emergency Director upon transfer of command and control.</li> </ul>	Non-RIE CEP limits command and control and non-delegable functions to the SM and SED. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
[2.3 Emergency Response Support and Resources] This section describes the arrangements that Florida Power & Light Company has made for assistance to augment the Emergency Response Organization.		Editorial Wording removed. Section descriptions in the current plan replaced with planning standard wording. No added, removed or altered commitments or change of intent.
[2.3.1 Response Organization Representatives] Florida Power & Light company has provided facilities in the Emergency Operations Facility for representatives from FPL, State, Local, and Federal	[CEP – H.3] The Emergency Operations Facility (EOF) provides a dedicated location for support of the site event response activities. The EOF is sized to accommodate	Editorial Wording altered. No added, removed or altered commitments or change of intent.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Response Organizations.	ERO responders and NRC, FEMA, and state	
		representatives.	
128.	[2.3.2 Radiological Laboratories]	[CEP – C.4]	Editorial
	Florida Power & Light Company has primary and	NextEra has radiological laboratories located at each	Wording altered.
	backup radiological laboratory facilities available. Environmental sampling will be augmented by the State's Mobile Emergency Radiological Laboratory (MERL) within approximately 6 hours of notification. If required, the laboratory facilities at FPL's St. Lucie Plant can be used; appropriate arrangements will be made on an as needed basis.	site. The site laboratories are the central point for receipt and analysis of onsite samples and includes equipment for chemical and radiological analyses. The laboratories provide analyses of samples from plant systems. Environmental monitoring sample analysis is also performed on-site or arrangements are made with off-site facilities.	
		Annex – C.4}	
		The plant's on-site radiological laboratory serves as the primary facility with backup provided by the Radiation Protection counting room facilities.	
		If required, the laboratory facilities at FPL's St. Lucie Plant can be used.	
		Environmental sampling will be augmented by the State's Mobile Emergency Radiological Laboratory (MERL) within approximately 6 hours of notification. Analysis of off-site environmental samples will be performed at the MERL. A FH - BRC representative dispatched to the EOF will coordinate all State off-site field monitoring data and sample media.	
129.	[2.3.3 Additional Assistance]	[CEP – B.5]	Editorial
	The Institute of Nuclear Power Operations (INPO)	Institute of Nuclear Power Operations (INPO)	Wording altered.
	maintains industry source lists for personnel and equipment which can be made available for support services during an emergency. Additional technical assistance can also be obtained directly from the Nuclear Steam Supply System (NSSS) Vendor (Westinghouse Electric Corporation).	INPO has an emergency response plan that enables it to provide the assistance in locating sources of emergency personnel, equipment, and operational analysis.	No added, removed or altered commitments or change of intent.
130.	[2.3.4 Support to Federal Assistance Teams]	[CEP – A.3]	Non-RIE
	The Recovery Manager has the authority to request Federal assistance. It is expected that such assistance will be provided primarily by the NRC. Also, FEMA may send a representative for near-site coordination. It is expected that NRC personnel will begin to arrive at the site within 6 hours after declaration of a Site	Refer to Element B.1.a and Table B-1 for a list of key individuals responsible for command and control, alerting and notification, communications, public information, accident assessment, protective response (including authority to request federal assistance and to initiate other protective actions), and radiological	Removed specific detail of federal organizations contained in their respective plans and replaced with description of their organization's coordination for response to nuclear utility.

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#	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
	Area or General Emergency. Requests for assistance from the Department of Energy's Savannah River Operations in Aiken, South Carolina can be made by the State under the Federal Radiological Emergency Response Plan. Such requests are the responsibility of the Director of the Division of Emergency Management.  Federal assistance teams can achieve access to the plant via the Miami airport, approximately 1 hour from the plant. The Recovery Manager will assign an individual to meet such assistance teams and to escort them to the appropriate facilities on an as needed basis.  FPL has reserved space and facilities for a staff of nine from the NRC and one from FEMA at the EOF. This staff will have access to commercial telephone lines. Other support services (reproduction, office supplies, etc.) will be arranged through FPL. FPL has also allocated space in the Technical Support Center for a staff of five NRC personnel. This staff will have access to the dedicated ENS line. Other support services will be arranged through FPL. In addition to space in the TSC, FPL has provided a near-site facility for the NRC Response Team on the second floor of the building that houses the TSC (see Figure 2-6).	exposure control.  [CEP – B.1.a]  2. Technical Support Center (TSC)  A. Site Emergency Director  •  • Federal Assistance  [CEP – A.1.a]  2. Federal Organizations  Control, responsibility and interface of federal organizations is governed by the National Response Framework (NRF) and the Nuclear/Radiological Incident Annex to the NRF when they are called to respond to an event at a nuclear power plant. The NRC acts as the lead federal agency with regard to technical matters during a nuclear incident, including providing radiological assistance.  [CEP – H.3]  The Emergency Operations Facility (EOF) provides a dedicated location for support of the site event response activities. The EOF is sized to accommodate ERO responders and NRC, FEMA, and state representatives.	
131.	[2.4 Emergency Facilities and Equipment] This section describes the facilities and equipment that Florida Power & Light Company maintains in readiness for an emergency situation. Figure 2-6 shows the locations of the on-site facilities.		Editorial Wording removed. Section descriptions in the current plan replaced with planning standard wording. No added, removed or altered commitments or change of intent.
132.	[2.4.1 Control Room] For any emergency response, the Control Room serves as the initial point of control. The Shift Manager returns to or remains in the Control Room to assume the role of Emergency Coordinator. If necessary, the EC may leave the Control Room, after a proper turnover to a qualified alternate, to make a personal		Non-RIE  Control room design and capability governed by non-EP regulations and documented in the UFSAR.  NUREG-0654 R2 contains no element for a description of the control room as an emergency

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#### **Current Emergency Plan Common Emergency Plan and Site Annex** Change Type assessment regarding plant safety. The Control Room response facility. is designed to remain tenable under conditions ERO personnel, response related described in the FSAR. All plant related operations are leguipment and capabilities assigned directed from the Control Room. Nuclear plant to the control room are described in instrumentation, including Area and Process Radiation their associates planning standard Monitoring System instrumentation, is provided in the lelement. Control Room to give early warning of a potential emergency and to provide for continuing evaluation of an emergency situation. The Control Room contains the controls and instrumentation necessary for operation of the reactor under normal and emergency conditions. A supply of protective clothing and respiratory equipment is maintained in the Control Room. Table 2-3 provides a list of emergency equipment maintained in the Control Room. The Control Room contains the necessary communications equipment for notifying on-site personnel and off-site authorities in the event of an accident. This includes the State Hot Ring Down Telephone System, Emergency Satellite Communications System (EMNET), Emergency Notification System (ENS hotline) to the NRC Operations Center, commercial telephones, Florida Power & Light Company Radio System (VHF), plant page system, portable radio sets (walkie-talkies), and a radio paging system. These systems are used as defined by procedure to accomplish the necessary notifications and communications. [2.4.2 Emergency Operations Facility] Non-RIE [CEP - H.3] The Company maintains an Emergency Operations Physical EOF is not changed. The EOF is activated when minimum staffing Facility at the FPL General Office building (9250 W. Command and Control remains in requirements are met, key systems and equipment are Flagler in Miami) from which evaluation and TSC in CEP which alters the role of verified operational, and the ERO personnel are coordination of all FPL activities related to an the response actions performed by prepared to perform their functions. When activated. emergency can be carried out and from which FPL ERO personnel within the facility. the EOF's primary functions include: can provide information to Federal, State, and Local Coordinate emergency response activities with Refer to Analysis #1 and Analysis authorities. federal, state, and local authorities #2 for a detailed comparison Activation of the Emergency Operations Facility will be Coordinate support activities performed by evaluation of the ERO positions, initiated by the Recovery Manager. The Emergency personnel brought in to assist NextEra personnel functions/tasks, and response time Operations Facility will be activated for an emergency Perform offsite dose assessment and field commitments of the CEP. classified as a Site Area Emergency or General

Emergency Operations Facility with in-depth

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#### **Current Emergency Plan Common Emergency Plan and Site Annex Change Type** Emergency. The Recovery Manager may activate the monitoring activities. Emergency Operations Facility in other emergency Development of dose based offsite protective classes if desired. actions recommendations. The Emergency Operations Facility (EOF) provides for • Coordination of emergency response activities with sufficient space to accommodate the Florida Power & federal, state, and local authorities. Light Company Response Organization and Coordination of radiological and environmental representatives of the designated Federal, State, and assessment activities with offsite agencies. Local authorities. Alternate temporary locations for the Communicate with the NRC HPN line. Emergency Operations Facility may be designated by Coordinate corporate support. the Recovery Manager if a natural disaster or other Support site acquisition of external assistance external events significantly affects the operational (technical, craft, admin, etc.). capability of the facility. Support site acquisition of equipment, supply, and The Emergency Operations Facility has an emergency logistic resources. communications network which includes commercial Because the EOF is located outside the plume (Bell) telephone lines, redundant company radio exposure EPZ for all NextEra sites, specialized systems, and dedicated communication capability with ventilation systems and radiological monitoring are not off-site agencies. required. The EOF ventilation system is consistent in The Emergency Operations Facility will be staffed, as design with standard building codes. required, under the direction of the Recovery Each EOF provides communications to the Control Manager. Arrangements will be made to staff the EOF Room, TSC, field monitoring teams, NRC, and OROs. in a timely manner. The EOF has the capability for the acquisition, display, and evaluation of unit, radiological and meteorological conditions necessary to perform accident assessment and determine protective measures. The EOFs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents. The EOF has the capability to support the remote response of ERO positions. [Annex - H.3] The Emergency Operations Facility (EOF) is located at the FPL General Office Building (9250 W. Flagler in Miami), approximately 25 miles north of the site. [2.4.3 Technical Support Center] [CEP - H.1] Non-RIE The Company maintains an on-site Technical Support The Technical Support Center (TSC) provides a Command and Control remains in Center (TSC) to provide the Control Room and the dedicated location for management and technical TSC in CEP which alters the role of

support to operations personnel and to relieve the

the response actions performed by

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#### **Current Emergency Plan**

diagnostic and engineering assistance without adding to congestion within the Control Room. This assistance can help determine the operational decisions that would be appropriate to better control and to mitigate the consequences of an emergency. Activation of the Technical Support Center will normally be initiated by the Emergency Coordinator in the event of an Alert, Site Area Emergency or General prepared to perform their functions. When activated, Emergency. The TSC will be staffed by personnel under the direction of the Emergency Coordinator. Arrangements will be made to staff the TSC in a timely • manner.

The Technical Support Center provides for access to certain plant parameters monitored in the Control Room. The Technical Support Center contains equipment for monitoring airborne contamination and direct radiation. The Technical Support Center also contains protective clothing and respiratory protection devices. Pertinent records and drawings are available in the TSC. Table 2-3 provides a listing of the emergency equipment maintained in the Technical Support Center.

The Technical Support Center has an emergency communications network including commercial telephone lines to the Control Room, the Emergency Operations Facility, and the ENS dedicated phone line to the NRC Operations Center (in Maryland) and the NRC Region II Office (in Atlanta, GA).

#### **Common Emergency Plan and Site Annex**

operations staff of emergency response actions and communications not related to plant system manipulations. The TSC is sized to accommodate ERO responders and NRC representatives.

The TSC is activated when minimum staffing requirements are met, key systems and equipment are commitments of the CEP. verified operational, and the ERO personnel are the TSC's primary functions include:

- Provide ERO command & control
- Continued evaluation of event conditions
- Develop and issue offsite protective actions recommendations
- Develop ORO event notifications
- Provide ENS communications with the NRC
- Display and trend plant data
- Develop response priorities and mitigative actions
- Coordination of site emergency response actions
- Provide engineering support

Personnel in the TSCs are protected from radiological hazards, including direct radiation and airborne contaminants under accident conditions, with radiological habitability standards similar to the Control Room. To ensure adequate radiological protection, radiation monitoring equipment is located in the TSCs, or periodic radiation surveys are conducted. These systems indicate radiation dose rates while in use. In addition, potassium iodide (KI) is available to TSC personnel for use.

Each TSC provides communications to the Control Room, OSC, EOF, Corporate Headquarters, NRC, and OROs.

The TSCs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.

TSC has the capability to support the remote response of the ERO engineering positions.

#### Change Type

ERO personnel within the facility. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time Analysis #4 Page 57 of 134

#	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
		[Annex – H.1] The Technical Support Center is located in a separate building inside the protected area near the Circulating Water Inlet Bay.	
		The Technical Support Center (TSC) contains equipment for monitoring airborne contamination and direct radiation. The TSC also contains protective clothing and respiratory protection devices. Pertinent records and drawings are available in the TSC.  The TSC has an emergency communications network including commercial telephone lines to the Control	
		Room, OSC, EOF, NECC, and the ENS dedicated phone line to the NRC Operations Center (in Maryland) and the NRC Region II Office (in Atlanta, GA).	
	[2.4.4 Operational Support Center]	[CEP - H.2]	Non-RIE
	The Company maintains an on-site Operations Support Center (OSC) to serve as an assembly point for auxiliary operators, who are not needed at assigned stations and Emergency Response Organization personnel who do not report immediately to the scene of the emergency. Emergency teams will be directed to appropriate activities by the Emergency Coordinator or designee through the OSC Supervisor. Equipment that can be used by personnel dispatched from the OSC is stored in or near the OSC. Table 2-3 indicates the types of radiological protection material and equipment stored there.  Activation of the OSC will be initiated by the Emergency Coordinator. The OSC will be in operation	response activities and for staging personnel and equipment. The OSC is sized to accommodate ERO	No functional changes are made to the OSC. Facility activation time is now tied to ERO response time requirements (90 minutes vs. 120 minutes).  Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
	for an Alert, Site Area Emergency or General Emergency within two hours of the declaration. Arrangements will be made to staff the OSC in a timely manner.  The OSC is maintained in the Maintenance Building. Open line telephone communications are maintained between the OSC and the Technical Support Center.	Dosimetry (dose of legal record and self-reading capable of monitoring emergency radiation exposure), respiratory protection, radiation survey equipment, and RWPs are available to OSC personnel. In the event of a personnel contamination, decontamination will be performed in the area normally designated for this purpose.  Radiation and contamination levels in and around the OSC are assessed during emergencies.	

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		Each OSC provides communications to the Control Room, TSC, and emergency response teams.	
		The OSCs have access to drawings and other records, including general arrangement diagrams, piping and instrumentation diagrams (P&IDs), electrical schematics and plant procedures as either electronic or paper documents.	
		[Annex – H.2]	
		The Operations Support Center (OSC) is maintained in the Maintenance Building. Open line telephone communications are maintained between the OSC and the TSC.	
136.	[2.4.5 Alternate Operational Support Center]	[Annex – H.2]	No Change
	In the event that the OSC becomes uninhabitable, the Emergency Coordinator will designate an alternate location in accordance with procedures.	In the event that the OSC becomes uninhabitable, the Emergency Director will designate an alternate location in accordance with procedures.	
137.	[2.4.6 Joint Information Center]	[Annex – H.5]	Non-RIE
	A Joint Information Center (JIC) will be provided to allow the news media access to information from the Emergency Operations Facility. The Emergency Information Manager will designate an individual to supervise the JIC. The JIC is located on the second floor of the General Office Building.  A Near-site Information Center may be set up at a location closer to the plant if deemed necessary by the Emergency Information Manager. The Emergency Information Manager will designate an individual to set	no time requirement.  When activated the JIC functions as a physical location for interacting with the media and for coordination between NextEra, federal and ORO PIOs regarding communications information to the public	No functional changes are made to the JIC. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
	up and supervise the Near-site Information Center, when activated.	NextEra provides space and equipment at their corporate facility to provide coordination of public information response activities with site and corporate JIS/JIC personnel.  [Annex – H.5]	
		The Joint Information Center (JIC) and the EOF are	
		located in the same building (see Element H.3).	
138.	[2.4.7 Alternate Facilities for Use during a Hostile Action Event] The EOF serves as the alternate facility for the	[Annex – H.4] An alternative facility provides a location for the staging of ERO personnel in the event of a Security or	Editorial Wording altered to align with element level of detail and fleet
	Technical Support Center and Operational Support	Hostile Action threat for each NextEra site. The	description.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Center in a hostile action event at the station. The EOF is equipped with offsite and onsite communication, command and control, and technical information to support a plant response from offsite.	alternative facility may also serve as an evacuation location for TSC and OSC personnel should those facilities become uninhabitable.  The alternative facility can communicate with the	No added, removed or altered commitments or change of intent.
	A near site incident command post will be established in coordination with Miami-Dade Law Enforcement, and Fire and EMS to facilitate actions onsite.	Control Room, site security, and EOF. The functions of offsite notification and PARs can be performed from the Alternative Facility. Emergency response team planning and preparation can be performed from the Alternative Facility.	
		[Annex – H.4	
		The EOF serves as the alternative facility for the TSC and OSC in a hostile action event at the station. The EOF is equipped with offsite and onsite communication, command and control, and technical information to support a plant response from offsite.	
		A near site incident command post will be established in coordination with Miami-Dade Law Enforcement, and Fire and EMS to facilitate actions onsite.	
139.	[2.4.8 Miami-Dade County Emergency Operations		Non-RIE
	Center (EOC)]		Removed wording.
	The Miami Dade County EOC will be the point from which county response activities will be controlled. The facility is located at 9300 NW 41 Street, Miami, Florida. Communications include Hot Ring Down,		ORO EOC descriptions are contained in their respective E-Plans.
	(EMNET) Satellite Communications System), RACES, teletype, police, and fire networks, and telephone.		Communications capabilities from the site to offsite OROs described in other sections.
140.	[2.4.9 Monroe County (Key Largo) Emergency		Non-RIE
	Operations Center (EOC)]		Removed wording.
	The Monroe County (Key Largo) EOC, located at the Tavernier Fire Station #22, will be where the County's emergency response activities are controlled. Communications include the Hot Ring Down, (EMNET) (Satellite Communications System), facsimile, police and fire radio, and commercial		ORO EOC description are contained in their respective E-Plans. Communications capabilities from the site to offsite OROs described in other sections.
	telephone. The Monroe County EOC in Marathon will		
4.4.4	aid the Tavernier EOC where possible.		Non DIE
141.	[2.4.10 Florida State Emergency Operations Center (State Watch Office)]		Non-RIE Removed wording.
	The State's initial response comes from the State		Transvou wording.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Emergency Operations Center (EOC) in Tallahassee. Initial notification goes to the State Watch Office located in the State EOC. The location is, 2555 Shumard Oak Blvd., Tallahassee, Florida. Communications include Hot Ring Down, (EMNET) (Satellite Communications System), facsimile, teletype and telephone. This facility is manned 24 hours a day by a duty officer.		ORO EOC description are contained in their respective E-Plans. Communications capabilities from the site to offsite OROs described in other sections.
142.	[2.5 Medical and Health Support] This section describes the agreements and provisions that Florida Power & Light Company has made for emergency medical support.		Editorial Wording removed. Section descriptions in the current plan replaced with planning standard wording. No added, removed or altered commitments or change of intent.
143.	[2.5 Medical and Health Support]  Plant First Aid Facility  The Plant First Aid Facility is provided with first aid supplies. In addition, standard 24-unit first aid kits are maintained at numerous locations throughout the Turkey Point Plant. A commercial first aid kit, containing the same type of supplies as the 24-unit kit is maintained in the Florida City Substation.  The medical supplies and first aid kits in the first aid station, and Florida City Substation, are checked at least every quarter and replenished as necessary by the Safety Department (Substation is replenished and checked by Radiation Protection ). Stretchers are placed at strategic locations at Units 3 and 4.	[CEP – L.2.a] On-shift first aid personnel will provide first aid to individuals who are injured. Radiation protection personnel will provide contamination control support to potentially contaminated injured personnel.  NextEra maintains first aid supplies, and equipment for the treatment of injured or contaminated injured persons. Descriptions of equipment and supplies, and radiological monitoring and decontamination equipment and supplies are in site procedures.	Non-RIE  First Aid capabilities and equipment for industrial facilities are governed under other (non part 50) regulations.  The CEP acknowledges that the site maintains such a capability and its resources, but does not document specific commitments covered by the separate requirements.  This change is consistent with NUREG-0654 R2 regarding reference to first aid in the E-Plan.
144.	[2.5 Medical and Health Support]  Plant First Aid Facility  A personnel decontamination washroom and shower room with chemical decontamination agents is provided in the FPL Dress Out Building. Accepted decontamination practices will be employed on site as per Radiation Protection procedure. Life endangering injuries such as extensive burns, serious wounds or	Personnel decontamination is performed using normal radiation protection procedures in on-site facilities.	Non-RIE Additional content included to address the level of detail of the NUREG-0654 R2 elements.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		Injured personnel are evaluated for radiological contamination prior to transport to a medical facility per site procedures. If contamination monitoring is not possible due to the medical condition of the individual, contamination monitoring is performed as soon as possible following treatment at the medical facility.	
		[Annex – K.e.1]	
		Personnel decontamination facilities are available in four locations. Their use will be governed by the nature of the incident.	
		FPL Dress Out Building - Showers and sinks available for the decontamination of personnel with no (or minor) injuries.	
		2) Baptist Hospital of Miami - Decontamination shower and contaminated injury treatment room. For interim use to treat severely injured personnel. Located approximately 30 miles north of PTN.	
		<ol> <li>Mercy Hospital - Contaminated Injury Treatment Room. For interim use to treat severely injured personnel. Located approximately 30 miles north of PTN.</li> </ol>	
		<ol> <li>Decontamination Facility - The Florida City Substation has personnel decontamination capabilities available.</li> </ol>	
		Methods for decontamination and monitoring are described in plant procedures. Contamination monitors and procedures are adequate for assessing potentially contaminated wounds either on site or at the decontamination facility.	
145.	[2.5 Medical and Health Support]		Editorial
	Personnel with injuries that cannot be adequately handled on site, involving radiation or radioactive contamination, will be handled by Sheridan Emergency Physicians Services in the Emergency	Arrangements have been made with local hospitals for the medical treatment of contaminated injured or over exposed personnel. These facilities and their services are available 24 hours per day.	Introduction wording altered. No added, removed or altered commitments or change of intent.
	Room at Baptist Hospital of Miami, Inc., or by Mercy	[Annex – L.2.b]	
	Hospital.	Sheridan Emergency Physician Services of South	
	Sheridan Emergency Physician Services of South Dade	Dade Shoridan Emergancy Physician Sorvices of South	
	<u> </u>	Sheridan Emergency Physician Services of South	

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a 24-hour basis.

#### Sheridan Emergency Physician Services of South Dade, located at Baptist Hospital of Miami, provides for the immediate availability of fully equipped medical facilities with a staff of physicians and nurses skilled in the treatment of personal injury accompanied by radioactive contamination. This facility is available on

The patient receiving area is equipped for patient decontamination and the performance of emergency medical procedures for life saving purposes. Additional emergency medical facilities in the hospital include the emergency room and an intensive care unit available for the treatment of decontaminated radiation accident casualties or persons who have received only internal radiation exposures.

Sheridan Emergency Physician Services of South Dade, will provide for hospital treatment, medical examinations, and laboratory services for those employees and other persons designated by Florida Power & Light who have been involved in a radiation incident.

#### Mercy Hospital

Mercy Hospital of Miami, also provides for the immediate availability of medical facilities and trained hospital staff in the treatment of personal injury accompanied by radioactive contamination. Medical services are available on a 24-hour basis.

The patient receiving area is equipped for patient decontamination and the performance of emergency medical procedures for life saving purposes. Additional emergency medical facilities in the hospital include the emergency room and an intensive care unit available for the treatment of decontaminated radiation accident casualties or persons who have received only internal radiation exposures.

Mercy Hospital will provide for hospital treatment, medical examinations, and laboratory services for those employees and other persons designated by Florida Power & Light who have been involved in a

#### **Common Emergency Plan and Site Annex**

facility is available on a 24-hour basis.

Dade, located at Baptist Hospital of Miami, provides for the immediate availability of fully equipped medical facilities with a staff of physicians and nurses skilled in the treatment of personal injury accompanied by radioactive contamination. This

The patient receiving area is equipped for patient decontamination and the performance of emergency medical procedures for life saving purposes. Additional emergency medical facilities in the hospital include the emergency room and an intensive care unit available for the treatment of decontaminated radiation accident casualties or persons who have received only internal radiation exposures.

Sheridan Emergency Physician Services of South Dade, will provide for hospital treatment, medical examinations, and laboratory services for those employees and other persons designated by Florida Power & Light who have been involved in a radiation incident.

#### 2. Mercy Hospital

Mercy Hospital of Miami, also provides for the immediate availability of medical facilities and trained hospital staff in the treatment of personal injury accompanied by radioactive contamination. Medical services are available on a 24-hour basis.

The patient receiving area is equipped for patient decontamination and the performance of emergency medical procedures for life saving purposes. Additional emergency medical facilities in the hospital include the emergency room and an intensive care unit available for the treatment of decontaminated radiation accident casualties or persons who have received only internal radiation exposures.

Mercy Hospital will provide for hospital treatment, medical examinations, and laboratory services for those employees and other persons designated by

#### Change Type

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	radiation incident.	Florida Power & Light who have been involved in a radiation incident.	
146.	[2.5 Medical and Health Support]	[Annex – L.2.b]	Editorial
	Backup Facilities	3. Backup Facilities	Introduction wording altered.
	When primary facilities are considered inappropriate because of the nature or severity of the injury sustained, then the injured person may be referred to a regional facility for hospitalization. Medical records, including bio-assay records, will be maintained permanently and copies furnished to Florida Power & Light.	When primary facilities are considered inappropriate because of the nature or severity of the injury sustained, then the injured person may be referred to a regional facility for hospitalization. Medical records, including bio-assay records, will be maintained permanently and copies furnished to Florida Power & Light.	Details of REAC/TS removed as those are stated in their own documents. No added, removed or altered commitments or change of intent.
	A letter of agreement between the Oak Ridge Associated Universities (ORAU) and Florida Power & Light Company provides backup support for the definitive care and treatment of seriously irradiated persons. The ORAU Medical and Health Sciences Division operates the Radiation Emergency Assistance Center/Training Site (REAC/TS) in Oak Ridge, Tennessee, for the US Department of Energy. It studies radiation and radioactive materials in diagnosis, therapy, and research. Its specialized facilities are available for the care and treatment of possible radiation accident victims.	[CEP – L.2.e] The Radiation Emergency Assistance Center Training Site (REAC/TS) located at Oak Ridge, Tennessee, will respond to and/or provide advice and assistance to offsite medical facilities in the event of a severe radiation accident.	
147.	[2.5 Medical and Health Support]	[Annex – L.4]	No Change
	Transportation of Injured Personnel  Normal county ambulance service, company vehicle, or private vehicle will provide transportation for injured	Normal county ambulance service, company vehicle, or private vehicle will provide transportation for injured personnel.	
	personnel. In case of a life-threatening situation, the Shift Manager will determine the mode of transportation. The US Coast Guard and Miami-Dade Fire Rescue can provide 24-hour helicopter transportation in a life-threatening situation to a designated hospital on an as available basis.	In case of a life-threatening situation, the Shift Manager will determine the mode of transportation. The US Coast Guard and Miami-Dade Fire Rescue can provide 24-hour helicopter transportation in a life-threatening situation to a designated hospital on an as available basis.	
148.	Communications	[CEP- F.2]	Editorial
	When injured personnel are transported to Baptist	Communications methods have been coordinated with	Content reworded.
	Hospital or Mercy Hospital by county ambulance, radic contact as well as telemetry is normally maintained between the Hospital and the ambulance. In	medical facilities (ambulance and hospital). Site specific communications systems used for hospital and ambulance coordination are described in the site	Communications systems details documented in section F.1.a.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	accordance with procedures, telephone notification is made by the Plant to the Hospital concerning the pending arrival of injured personnel. Additionally, if a helicopter were to be used, the Hospital could also maintain ground-to-air communications. Cellular telephones are available on site to be used as an alternative communication means.	annexes.  [Annex – F.2]  Communications to local medical facilities is via private telephone lines. Radio communications are possible through the county communications centers to their respective ambulance and hospital facilities.	No added, removed or altered commitments or change of intent.
149.	[Figure 2-1, FPL Emergency Response Organization]		Non-RIE
			The CEP and Annexes are formatted in a 50.47(b) outline.
			Removed figure. ERO description provided in Section B.1.a and Table B-1. NUREG-0654 R2 does not require an ERO figure.
150.	[Figure 2-2a, State, Local, and Federal Response	[Figure B.4: Interrelationship of Emergency Response	Non-RIE
	Before Executive Order] [Figure 2-2b, State, Local, and Federal Response	Organizations]	The CEP and Annexes are formatted in a 50.47(b) outline.
	After Executive Order]		Updated figure to represent interrelations in greater detail to address element.
151.	[Figure 2-3, Turkey Point Plant Normal Operating		Non-RIE
	Organization]		The CEP and Annexes are formatted in a 50.47(b) outline.
			Removed figure. Normal organization information provided in Section B.1.a. NUREG-0654 R2 does not require a normal organization figure.
152.	[Figure 2-4, On-Shift Emergency Response		Non-RIE
	Organization]		The CEP and Annexes are formatted in a 50.47(b) outline.
			Removed figure. Onshift ERO description provided in Section B.1.a and Table B-1. NUREG-0654 R2 does not require an onshift ERO figure.
153.	[Figure 2-5, Expanded Response Organization]		Non-RIE
			The CEP and Annexes are

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#	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
			formatted in a 50.47(b) outline.
			Removed figure. Augmented ERO description provided in Section B.1.a and Table B-1. NUREG-0654 R2 does not require an augmented ERO figure.
154.	[Figure 2-6, Turkey Point Plant Emergency Facilities		Non-RIE
	Location Map]		The CEP and Annexes are formatted in a 50.47(b) outline.
			Removed figure. ERF description provided in Section H. NUREG-0654 R2 does not require an ERF figure.
155.	[Table 2-2a, Shift and Emergency Staffing	[Table B-1, On-Shift and Augmenting ERO Staffing	Non-RIE
	Capabilities]	Plan]	The CEP has updated.
	[Table 2-2b, Florida Power & Light Emergency Response Organization Functions and Responsibilities]		Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
156.	[Table 2-3, On-Site Emergency Response Facilities		Non-RIE
	Emergency Equipment (Typical)]		The CEP and Annexes are formatted in a 50.47(b) outline.
			Removed table. CEP provides description of capabilities. Specific equipment used to fulfill those capabilities are contained in EPIPs. NUREG-0654 R2 does not require a typical list of kit content.
_	Emergency Classification System		
157.	One of a minimum set of names or titles established	[CEP – D]	Non-RIE
	for grouping off normal nuclear power plant conditions according to (1) their relative radiological seriousness, and (2) the time sensitive on-site and off-site radiological emergency preparedness actions necessary to respond to such conditions. The existing radiological emergency classification levels, in ascending order of seriousness are called: Unusual Event, Alert, Site Area Emergency, and General Emergency.	A standard emergency classification and action level scheme, the bases of which include facility system and effluent parameters, is in use by the nuclear facility licensee, and state and county response plans call for reliance on information provided by facility licensees for determinations of minimum initial offsite response measures	The CEP and Annexes are formatted in a 50.47(b) outline. Section purpose descriptions replaced with planning standard wording.

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#### 158. Unusual Event1

Events are in progress or have occurred which indicate a potential degradation in the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.

FPL actions in response to this category will be:

- 1) Assess and respond as directed by the Emergency Coordinator.
- 2) Report the Unusual Event to off-site authorities (FPL and non-FPL) in accordance with plant procedures.
- 3) Provide periodic plant status updates in accordance with plant procedures, typically every sixty minutes, upon significant change in plant conditions, or as agreed to with State, County and A summary of response actions taken at each ECL is Federal agencies.
- 4) Close out by verbal summary to off-site authorities, or escalate to a higher class.

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#### [CEP - D.1]

#### 1. Unusual Event (UE)

Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.

#### [CEP - D.3

Emergency plan implementing procedures provide instructions to ERO personnel for response activities primarily associated with assessment, classification, notification and protective actions. Other functions such as communications, termination and recovery are also addressed.

as follows:

#### 1. Unusual Event (UE)

- Initial and follow-up event notification to the OROs and NRC.
- Notification of ERO personnel. This is an information only notification and does not require activation of emergency facilities or response organizations. Any Emergency Response Facility (ERF) may be activated at the discretion of the **Emergency Director.**

#### [3.2 159. Alert1

Events are in progress or have occurred which involve 2. Alert an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION. Any releases are expected to be limited to small fractions of the EPA PAG exposure levels. FPL actions in response to this category will be:

- 1) Assess and respond as directed by the Emergency Coordinator.
- Augment resources as necessary by activating the CEP D.3

#### [CEP - D.1]

Events are in progress, or have occurred, which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable lifethreatening risk to site personnel or damage to site equipment because of hostile action. Any releases are expected to be small fractions of the EPA Protective Action Guideline exposure levels.

#### Non-RIE

**Change Type** 

ECL definition unchanged.

Action summary simplified to key activities and reference to further details in the EPIPs.

#### Non-RIE

ECL definition unchanged.

Action summary simplified to key activities and reference to further details in the EPIPs.

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### Change Type

Technical Support Center and Operations Support Center. The Recovery Manager should place the Emergency Operations Facility personnel in the facility for an Alert as conditions warrant.

- 3) Report the Alert Status to off-site authorities (FPL and non-FPL) in accordance with plant procedures.
- 4) Dispatch monitoring teams as directed by the TSC Radiation Protection Supervisor.
- 5) Provide periodic plant status updates in accordance with plant procedures typically every 60 minutes, upon significant change in plant status or as agreed to with State, County and Federal agencies.
- 6) Provide periodic meteorological assessments in accordance with plant procedures if releases are anticipated or occurring. If releases are occurring, provide dose estimates for actual releases.
- 7) Close out by verbal summary to off-site authorities, followed by a written summary within 24 hours, or escalate to a higher class.

Emergency plan implementing procedures provide instructions to ERO personnel for response activities primarily associated with assessment, classification. notification and protective actions. Other functions such as communications, termination and recovery are also addressed.

A summary of response actions taken at each ECL is as follows:

#### 2. Alert

- · Initial and follow-up event notification to the OROs and NRC.
- Augmentation of the shift ERO (refer to Element A.1.a) by activating the Technical Support Center, Operations Support Center and **Emergency Operations Facility.**
- The Joint Information System shall be established at this ECL, with Joint Information Center activation determined in coordination with the offsite agencies.
- · If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.

#### Site Area Emergency] [3.3 160.

Events are in progress or have occurred which involve 3 actual or likely major failures of plant functions needed for protection of the public or HOSTILE ACTION that results in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) that prevent effective access to, equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA PAG exposure levels beyond the SITE BOUNDARY.

FPL actions in response to this category will be:

- 1) Assess and respond as directed by the Emergency Coordinator.
- 2) Augment resources as necessary by activating the [CEP D.3 on-site Technical Support Center, the on-site Operations Support Center, the Emergency

[CEP - D.1]

#### Site Area Emergency

Events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public or hostile action that results in intentional damage or malicious acts; 1) toward site personnel or equipment that could lead to the likely failure of or; 2) that prevent effective access to, equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA PAG exposure levels beyond the site boundary.

Emergency plan implementing procedures provide instructions to ERO personnel for response activities

#### Non-RIE

ECL definition unchanged.

Action summary simplified to key activities and reference to further details in the EPIPs.

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#### **Current Emergency Plan Common Emergency Plan and Site Annex** Change Type Operations Facility and the Joint Information primarily associated with assessment, classification, Center. notification and protective actions. Other functions 3) Report the Site Area Emergency status to off-site such as communications, termination and recovery authorities (FPL and non-FPL) in accordance with are also addressed. plant procedures. A summary of response actions taken at each ECL is 4) Dispatch monitoring teams as directed by the TSC as follows: Radiation Protection Supervisor. 3. Site Area Emergency 5) Provide periodic plant status updates in Initial and follow-up event notification to the accordance with plant procedures typically every OROs and NRC. 60 minutes, upon significant change in plant status or as agreed to with State, County and · Augmentation of the shift ERO by activating the Federal agencies. TSC, OSC and EOF if not previously performed. 6) Provide periodic meteorological assessments in • The Joint Information System is in operation or accordance with plant procedures. Joint Information Center is staffed by NextEra Provide release and dose projections based on ERO (JIC activation determined in coordination available plant and meteorological information and with the offsite agencies). foreseeable contingencies. • Implementation of onsite protective actions (refer Close out or recommend a change in emergency to Section J). class when appropriate by briefing off-site • If a release is occurring, monitoring teams are authorities. available for dispatch and offsite dose projections Submit a brief written summary to off-site are developed. authorities within 24 hours after closing out the emergency. · Offsite precautionary actions may be recommended under certain conditions (as required by site specific OROs). General Emergency] [CEP - D.1] Non-RIE 161. [3.4 Events are in progress or have occurred which involve 4. General Emergency ECL definition unchanged. actual or IMMINENT substantial core degradation or Action summary simplified to key Events are in progress or have occurred which melting with potential for loss of containment integrity activities and reference to further involve actual or imminent substantial core or HOSTILE ACTION that results in an actual loss of details in the EPIPs. degradation or melting with potential for loss of physical control of the facility. Releases can be containment integrity or hostile actions that result in reasonably expected to exceed EPA PAG exposure an actual loss of physical control of the facility. levels offsite for more than the immediate site area. Releases can be reasonably expected to exceed FPL actions in response to this category will be: EPA PAG exposure levels offsite for more than the 1) Assess and respond as directed by the immediate site area... Emergency Coordinator. ICEP - D.3 2) Augment resources by activating the on-site Technical Support Center, the on-site Operations Emergency plan implementing procedures provide instructions to ERO personnel for response activities Support Center, the Emergency Operations Facility and the Joint Information Center. primarily associated with assessment, classification, Report the General Emergency status to off-site

notification and protective actions. Other functions

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		- common - morgonoy r tan and otto ramox	
	authorities (FPL and non-FPL) in accordance with	such as communications, termination and recovery	
	plant procedures.	are also addressed.	
	4) Dispatch monitoring teams as directed by the TSC	A summary of response actions taken at each ECL is	
	Radiation Protection Supervisor.	as follows:	
	5) Provide periodic plant status updates in		
	accordance with plant procedures, typically every	4. <u>General Emergency</u>	
	60 minutes, upon significant change in plant	<ul> <li>Initial and follow-up event notification to the</li> </ul>	
	status or as agreed to with State, County and	OROs and NRC.	
	Federal agencies.	Augmentation of the shift ERO by activating the	
	Provide periodic meteorological assessments in	TSC, OSC and EOF if not previously performed.	
	accordance with plant procedures.		
	7) Provide release and dose projections based on	The Joint Information System is in operation or	
	available plant and meteorological information and	Joint Information Center is staffed by NextEra	
	foreseeable contingencies.	ERO (JIC activation determined in coordination	
		with the offsite agencies).	
	8) Provide off-site protective action	Implementation of onsite protective actions (refer	
	recommendations to the State DEM and counties.	to Section J) if not previously performed.	
	9) Close out or recommend a reduction in	If a release is occurring, monitoring teams are	
	emergency class when appropriate by briefing off-	available for dispatch and offsite dose projections	
	site authorities.	· · ·	
	10) Submit a brief written summary to off-site	are developed.	
	authorities within 24 hours after closing out the	<ul> <li>Offsite protective action recommendations are</li> </ul>	
	emergency.	communicated to the OROs and NRC.	
162.	[3.5 Emergency Action Levels]		Non-RIE
	The emergency action levels represent conditions		The CEP and Annexes are
	generally observable by plant personnel and can be		formatted in a 50.47(b) outline.
	used to properly classify an occurrence as an Unusual		` '
	Event, and Alert, a Site Area Emergency, or a General		Content describing EALs is included
	Emergency. Included in these wall charts are all		in the EAL TBD. Process for EAL
	accidents discussed by the Final Safety Analysis		changes is detailed in 50.54(q)
	Report. Minor changes to parameter values and		evaluation EPIP. Commitment to
	wording may be made in the emergency classification		50.54(q) described in Section P.
	wall charts throughout the year and incorporated in the		
	annual revision to the emergency plan.		
	Tables 3-2 and 3-3 contain listings of Process and		
	Effluent Monitors and Area Radiation Monitors that		
	may be used to assess emergency conditions. These		
	tables contain information regarding the type of		
	monitor, range of the instruments and typical setpoints		
	(actual setpoints are defined by procedure).		
	Table 3-4 contains a listing of non-radiological		
	monitors, meters, or gauges that may be used to		
<u> </u>	monitors, meters, or gauges that may be used to		

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	assess emergency conditions. This table contains information regarding the parameter measured, typical range of the monitor, meter or gauge, and typical normal range of the instruments.  The Emergency Coordinator may classify off-normal events into one of the four categories in the absence of a specific emergency action level based on an assessment that plant conditions have or may have adverse effects on the level of safety.  FPL maintains the capacity to provide an emergency classification within fifteen minutes of the condition becoming available to a knowledgeable operator. Fifteen minutes doesn't represent a grace period but a reasonable amount of time where conditions can be assessed and classification can occur. Events that already have a built-in time frame (fire, losing offsite power) must be declared as soon as that timeframe is exceeded or when it becomes evident that the conditions will be exceeded.  Note for Tables 3-2 through 3-4  The * indicators, valve numbers etc., indicates the placement of 3 or 4 e.g., TI-*-465 is TI-3-465 for Unit 3 and TI-4-465 for Unit 4.		
163.	[Table 3-2, Process and Effluent Radiation Monitors Used for Accident Assessment]		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. EAL related PRMs (effluent monitors are PRMs) are included in the EAL TBD.
164.	[Table 3-3, Area Radiation Monitors]		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. EAL related ARMs are included in the EAL TBD.
165.	[Table 3-4, Non-Radiological Instrumentation Used For Accident Assessment]		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. EAL related instruments are included in the EAL TBD.

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	4. Notification and Communication		
166.	This section describes the procedures and methods established for notification and follow-up	1	Non-RIE The CEP and Annexes are
	communications within Florida Power & Light Company, and from Florida Power & Light Company to the appropriate State, County, and Federal response organizations. Section 4.6, Communications Equipment, describes the referenced systems in more detail. Figure 1-2 shows the initial notification flow. Table 4-1 presents the organizational positions and alternates responsible for ensuring the manning of communications links for the primary response organizations.	organizations; the content of initial and follow up	formatted in a 50.47(b) outline. Section purpose descriptions replaced with planning standard wording.
167.	[4.1 FPL Emergency Response Organization]	[CEP – B.2]	Non-RIE
	The FPL Emergency Coordinator or Recovery Manager acting in accordance with Emergency Plan Implementing Procedures has the responsibility for	The Emergency Director ERO position has overall command and control of a declared emergency at a	CEP limits command and control and non-delegable functions to the SM and SED.
	making the necessary notifications and communications, and for determining the content of the notification. However, actual contacts may be made by designated communications assistants. The use of the phrase "Emergency Coordinator" below is	Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level.	Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
	also defined as "Emergency Coordinator or designee", except for those items described in Section 2.2.2.1 which cannot be delegated.	<ul><li>Event declaration</li><li>ORO and NRC Notification</li></ul>	Use of communicators is in accordance with NRC endorsed NEI 99-02.
	Once the EOF is declared operational, the Recovery Manager assumes the responsibility for notification to off-site governmental agencies.	Emergency Exposure (Dose limits and KI)	00 0 <u>2</u> .
168.	[4.1.1 Initial Notification]		Non-RIE
	Florida Power & Light Company emergency procedures call for the following actions for initial		The CEP and Annexes are formatted in a 50.47(b) outline.
	notification within the FPL organization.  Personnel detecting a potentially significant off-normal event or condition should report it to the Shift Manager		Procedure level detail removed in the CEP.
	by the fastest means available. This may mean face- to-face communication, the Plant Public Address System, or the commercial (Bell) telephone system.		Content describing analysis of off- normal conditions is included in the EAL TBD.
	These systems provide adequate means of redundancy for this initial notification.  The following information should be related to the		Onsite communications systems described in section F.

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	extent possible:  1) Nature of off-normal event (fire, pipe rupture, etc.)  2) Extent of damage to equipment  3) Location of event  4) Personnel injuries  5) Name of individual reporting the event  The Shift Manager directs the investigative actions to address the off-normal event. After investigation, the Shift Manager classifies the event and, if it is determined to be an Unusual Event, Alert, a Site Area Emergency, or a General Emergency, implements this Emergency Plan and becomes the Emergency Coordinator.  If necessary, the Emergency Coordinator notifies plant personnel of the emergency situation and any required protective actions via the Plant Public Address System.		
169.	[4.1.1 Initial Notification] Activation of FPL Personnel proceeds to the degree necessary, as determined by the Emergency Coordinator (EC) and Recovery Manager (RM) in response to the severity of the emergency.	<ol> <li>[CEP – E.1]</li> <li>ERO Notification         The Emergency Director will direct or perform notification of the ERO for all emergency classification levels. ERO personnel report to their assigned emergency response facilities as directed. In the event of a security threat, personnel may be instructed to respond to alternative facilities, or seek cover if on-site.     </li> </ol>	Non-RIE  ERO activation reworded for consistency with NUREG-0654 R2 elements.  The CEP has been updated. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
170.	The Emergency Coordinator will relay information to the Recovery Manager (RM), this may be done via the Duty Call Supervisor. The DCS notifies the RM and appropriate emergency response personnel by commercial telephone, cellular phone, or beeper. The Emergency Coordinator provides the following information to the DCS to the extent possible:  o Type of accident or incident o Affected unit o Assessment of the emergency condition (including the class of emergency) o Information on personnel injuries, and an estimate of personnel radiation exposures o Offsite support already called in and/or required o An estimate of the magnitude of a radioactive material release and the area possibly affected o Actions already taken or recommended with respect to the evacuation of various on-site areas o Wind speed and direction o Assessment of potential radiation exposure to		Non-RIE  NUREG-0654 R2 does not required supplemental ERO responders to be included in the E-Plan.  Notification of the fleet duty operations individual addressed as optional within EPIPs.
171.	persons offsite and any protective actions for offsite areas recommended  [4.1.2 Communications] Initially, communications between the Emergency Coordinator (in the Control Room) and the FPL Expanded Emergency Response Organization are by		Non-RIE Process altered. SM transfers ED to SED as soon as possible.
172.	telephone, with radio as the backup.  [4.1.2 Communications] Follow-up messages regarding the plant status and requests for on-site support by off-site organizations will be made periodically and as needed by the EC to the RM. Recommendations for off-site protective measures to DEM may be included as part of follow-up messages. These measures are referenced in Figure 5-1.	[CEP – E.3] In conjunction with OROs, NextEra sites have established the content of the follow-up messages, which will include additional information regarding event conditions and response actions.	Non-RIE Reworded content. PARs and PAR upgrades are a required initial notification, not follow-up.
173.	[4.2 State Agencies] State of Florida notification and communications procedures are presented in the Florida Radiological Emergency Management Plan for Nuclear Power Plants. File locations are listed in Appendix A.		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed wording not applicable to a NUREG-0654 R2 licensee related

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#### [4.2.1 Division of Emergency Management] 174. **Initial Notification**

FPL's Emergency Coordinator will make initial notification within approximately 15 minutes of declaring any emergency to the Division of Emergency Management via the Hot Ring Down Telephone System to the State Watch Office Duty Officer at the State Watch Office in Tallahassee. Commercial telephone and EMNET (Satellite Communications System) serve as the backup systems for initial notification. Backup phone numbers for 24-hour per day notification are provided by procedure. Information to be communicated to DEM during the initial notification is shown in the State of Florida Notification Message Form, Table 4-2. The listed information will be provided to the extent possible at the time of notification. Information that should be included in follow-up messages is also shown in Table 4-2. The follow-up message may come from the TSC staff, if it is operational, or the EOF, if it is operational. The initial notification may be brief with certain information not available. Follow-up messages from the Emergency Coordinator/RM to the Division of Emergency Management (DEM) will include the required information as it becomes available. The Division of Emergency Management (DEM) has established a procedure to authenticate emergency notification from the Turkey Point Plant. The Hot Ring Down and EMNET Systems are restricted circuits under control of DEM and local government. Their use is self-authenticating.

#### [CEP - E.1]

#### 2. ORO Event Notification

NextEra, in cooperation with the OROs, has established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes are made to PARs, a notification to the OROs is made within 15 minutes.

Receipt location of notification messages is site specific. ORO notification locations are described in the site annexes.

#### [CEP - E.1.a]

Notifications to OROs include a means of verification or authentication within the automated system or by providing call back verification phone numbers.

#### [CEP - E.3]

NextEra sites and OROs have established the content of the initial notification message to be used during an emergency. Minimum content of the initial notification will include the following:

- · The site's name
- · Time of event
- The ECL
- Protective Action Recommendation (PAR)
- · Whether a release is taking place

#### [Annex – E.1]

#### ORO Event Notification

The site-specific state and county entities (24/7) warning points) notified of a declared emergency at PTN are as follows:

- State of Florida Division of Emergency Management
- Miami-Dade County Emergency Response **Directors**
- Monroe County Emergency Response Directors

#### lelement. Non-RIE

The CEP and Annexes are formatted in a 50.47(b) outline.

Removed wording not applicable to a NUREG-0654 R2 element.

Communications systems described in Section F.

Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Communications The Emergency Coordinator/RM will maintain periodic contact with the State Watch Office, located at the State EOC in Tallahassee, via the Hot Ring Down network. FPL responsibility for communication with off-site State and Local government agencies is transferred from the Emergency Coordinator to the Recovery Manager when the Recovery Manager declares the EOF operational.		Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
176.	[4.2.2 Florida Health Bureau of Radiation Control] Initial Notification The Division of Emergency Management (DEM) State Watch Office Duty Officer is responsible for notifying the Florida Health Bureau of Radiation Control (FH - BRC). A Health Physicist contacts the Miami-Dade County EOC to ascertain what, if any, protective actions have been initiated. If required, the Bureau of Radiation Control activates the FH - BRC's Mobile Emergency Radiological Laboratory (MERL) and/or the Radiological Monitoring Teams. Communications The Public Health Physicist maintains contact with the Division of Emergency Management (DEM) via vehicle radio in transit to the FPL Emergency Operations Facility. Contact is maintained with the Mobile Emergency Radiological Laboratory (MERL) by the Division of Emergency Management (DEM) via radio or cellular phone while the MERL is in transit. On arrival, commercial phones are available also. The State Plan describes provisions for communications between the EOC and State off-site radiological monitoring teams, as well as		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed wording not applicable to a NUREG-0654 R2 licensee related element.
		<ul> <li>[CEP – E.1]</li> <li>2. ORO Event Notification</li> <li>NextEra, in cooperation with the OROs, has established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes</li> </ul>	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed wording not applicable to a NUREG-0654 R2 element. Communications systems described

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notify the Division of Emergency Management for all four emergency classes. The Hot Ring Down System is manned on a 24-hour basis by the Miami-Dade County Department of Public Safety (911 Center) and Monroe County Sheriff's Office (central dispatch in Marathon).

The Emergency Management Directors can then be reached by telephone or by dispatching a patrol car. Also, the State Watch Office Duty Officer at the Division of Emergency Management is responsible for confirming the receipt of emergency notice by the County Office of Emergency Management Directors. When the emergency notification is by commercial telephone, the State Watch Office Duty Officer is responsible for verifying the message from the Plant by a call back procedure and informing the County Directors that the message has been verified. Backup phone numbers for 24 hour per day notification are provided by procedure.

Follow-up messages concerning the emergency may come from the TSC staff or the EOF. Information that should be contained in these messages is shown in Table 4-2.

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are made to PARs, a notification to the OROs is made within 15 minutes.

Receipt location of notification messages is site specific. ORO notification locations are described in the site annexes.

#### [CEP - E.1.a]

Notifications to OROs include a means of verification or authentication within the automated system or by providing call back verification phone numbers.

#### [CEP - E.3]

NextEra sites and OROs have established the content of the initial notification message to be used during an emergency. Minimum content of the initial notification will include the following:

- The site's name
- · Time of event
- · The ECL
- Protective Action Recommendation (PAR)
- · Whether a release is taking place

#### [Annex – E.1]

#### 2. ORO Event Notification

The site-specific state and county entities (24/7 warning points) notified of a declared emergency at PTN are as follows:

- State of Florida Division of Emergency Management
- Miami-Dade County Emergency Response Directors
- Monroe County Emergency Response Directors

# Change Type in Section F.

Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

### 178. Communications

The Miami-Dade County Emergency Management Director proceeds to the Miami-Dade County Emergency Operations Center and uses the communication channels available there. These include Hot Ring Down, (EMNET) (Satellite Communications System), RACES, teletype, police and fire networks, and telephone.

#### Non-RIE

The CEP and Annexes are formatted in a 50.47(b) outline.

Removed wording not applicable to a NUREG-0654 R2 licensee related element.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	The Monroe County Office of Emergency Management Director proceeds to the Emergency Operations Center and uses the communications channels available there. These include HRD, (EMNET) (Satellite Communications System), RACES, teletype, police, and fire networks, facsimile, and commercial telephone.		
179.	[4.4 Federal Agencies] [4.4.1 U. S. Nuclear Regulatory Commission] Initial Notification The NRC Operations Center in Maryland is notified of all radiological emergencies via the Emergency Notification System from the Control Room. The notifications are made in accordance with Federal Regulations and plant procedures. The Emergency Coordinator or designee notifies the NRC Operations Center immediately after notification of the appropriate state or local agencies and not later than one hour after the licensee declares one of the Emergency Classifications. Alternate commercial phone numbers are provided by procedure. Communications Communications Communications with the NRC may be handled as necessary by telephone from the Control Room, the TSC (if operational), or the EOF (if operational).	<ul> <li>[CEP – E.1]</li> <li>3. NRC Event Notification</li> <li>NextEra will notify the NRC using ENS as soon as possible after notification of the OROs, and not later than 60 minutes after event declaration.</li> <li>An accelerated call to the NRC will be made immediately after notification of local law enforcement agencies (LLEAs), or within about 15 minutes of the recognition of the security-based threat (discovery of an imminent threat or attack against the site), to ensure the NRC is notified of safeguards events. The information provided in the accelerated NRC notification will be limited to the following:</li> <li>Site name.</li> <li>ECL if determined prior to the accelerated notification.</li> <li>Nature of the threat and the attack status.</li> </ul>	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed wording not applicable to a NUREG-0654 R2 element. Communications systems described in Section F. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
180.	[4.4.1 U. S. Coast Guard] Assistance from the Coast Guard for on-site rescue activities, aid, or evacuation of persons in danger, and for the protection of property threatened by any type of disaster can be requested by telephone call from the Emergency Coordinator or designee or the Recovery Manager or designee to the Coast Guard Duty Officer.  [4.5 Notification of the Public by the State/County]	Annex – L.4] In case of a life-threatening situation, the Shift Manager will determine the mode of transportation. The US Coast Guard and Miami-Dade Fire Rescue can provide 24-hour helicopter transportation in a life- threatening situation to a designated hospital on an as available basis.	Non-RIE Shift Manager maintains responsibility for determining offsite support (police, fire, medical) response onto the site.  Non-RIE
182.	The Florida Radiological Emergency Management Plan for Nuclear Power Plants defines the State and County procedures for notifying the public in the event of an emergency. Section 5 describes further provisions.  [4.6 Communications Equipment]	[CEP – F]	The CEP and Annexes are formatted in a 50.47(b) outline. Removed wording not applicable to a NUREG-0654 R2 licensee related element.  Non-RIE

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#	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
	The various communications systems previously discussed are described in more detail below. This communications network incorporates all telephones, the Plant Public Address System, fixed and mobile radio systems, and radio "beepers" employed for routine plant operation and other normal Company business. In addition, the communication systems of State and County agencies and other organizations with which the Company has emergency assistance agreements will be used to implement emergency activities.	Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.  CEP – F.1.a]  Each site maintains communications systems that are designed to facilitate normal and emergency communication. Refer to Chapter 9 of the UFSARs for descriptions of the primary site communications systems.  Provisions exist for continuous capability of communications with OROs and the NRC. Systems available for internal and external communications include:  • Telephone Systems  • Public Address System  • Radio Communications  • Cellular Telephones  • Local and Wide Area Networks  • Data Systems  Cellular and satellite telephones provide communications capability should the main telephone systems lose power.  [Annex – F.1.a]  This communications network used for PTN emergency response incorporates all telephones, the public address system, and fixed and mobile radio systems employed for routine plant operation and other normal company business. In addition, the communication systems of state and county agencies and other organizations with which the company has emergency assistance agreements will be used to	The CEP and Annexes are formatted in a 50.47(b) outline. Section purpose descriptions replaced with planning standard wording.
183.	[4.6 Communications Equipment]	implement emergency response activities.  [Annex – F.1.a]	Editorial
103.	Plant Page System	Plant Page System	Content reworded.
		1 <del></del>	
	The Plant Page System, with speakers strategically located throughout the Plant site, provides for the	The plant page system, with speakers strategically located throughout the site, provides for the	FSAR maintains licensing basis system descriptions.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	emergency. A solid state Plant Page System is powered from a preferred 120V AC circuit. An alternate power supply is provided. The Plant Page System uses noise canceling dynamic microphone type handsets located throughout the plant. The system includes one paging channel and	transmission of warning and instructions in event of an emergency. The system is powered from a preferred 120V AC circuit. An alternate power supply is provided. The plant page system uses noise canceling dynamic microphone type handsets located throughout the plant. The system includes one paging channel and one party line channel.  The plant page system at Units 3 and 4 is completely independent of the system at Unit 5. Notification by phone to the Unit 5 Control Room (by the Unit 3 and 4 Control Room) enables fossil plant employees to be advised of actions to take as a result of events occurring at the nuclear site.	No added, removed or altered commitments or change of intent.
184.		[Annex – F.1.a]	Editorial
	Bell System Telephones (Commercial Telephones) There are numerous Bell Telephone System links connected to the plant for normal dial telephone service. This system represents the primary system for routine communication with areas outside the plant.	There are numerous commercial telephone system links connected to the plant for normal dial telephone service. This system represents the primary system for routine communication with areas outside the plant.	Removed reference to specific company (Bell).  No added, removed or altered commitments or change of intent.
185.	[4.6 Communications Equipment]	[Annex – F.1.a]	No Change
106	Motor Maintenance Circuit This is a communications circuit, separate from the Plant Page System, but using 120V AC power from the Plant Page System power supply source. The circuit consists of various outlets throughout the plant, near major equipment both inside and outside the containment and at the fuel handling areas, into which a headset with a microphone can be plugged, to enable communication to be carried on while leaving the operator's hands free. Outlets for this circuit are also provided in the Control Room of Units 3 and 4 so that communications between the Control Room and outlying stations can be established.	Motor Maintenance Circuit  This is a communications circuit, separate from the plant page system, but using 120V AC power from the plant page system power supply source. The circuit consists of various outlets throughout the plant, near major equipment both inside and outside the containment and at the fuel handling areas, into which a headset with a microphone can be plugged, to enable communication to be carried on while leaving the operator's hands free. Outlets for this circuit are also provided in the Control Room of Units 3 and 4 so that communications between the Control Room and outlying stations can be established.	Non DIE
186.	[4.6 Communications Equipment]	[Annex – F.1.a]	Non-RIE Site telephone system (VOIP and
	FPL Intelligent Tandem Network (ITN) System Telephones in most FPL locations may access the	There are numerous commercial telephone system links connected to the plant for normal dial telephone	Site telephone system (VOIP and internal) utilize commercial systems

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Intelligent Tandem Network (ITN) Telephone System. Through the ITN and its associated "Uniform Dialing Plan", other company office locations may be directly dialed, WATS line may be accessed, and local telephone calls may be placed. This system uses a combination of Bell telephones and FPL telephones, depending upon office location.	service. This system represents the primary system for routine communication with areas outside the plant.	and are collectively described.
187.	[4.6 Communications Equipment]  Portable Radio Transceiver Sets  Various portable radio transceivers (walkie-talkies) are available to supplement the fixed communications equipment in the plant. These radios are lightweight battery operated units which may be easily carried by personnel to any location on the plant site. Some of these portable radios are capable of communicating with the FM radio transceiver over a range of several miles.	Portable Radio Transceiver Sets Various portable radio transceivers (walkie-talkies) are available to supplement the fixed communications equipment in the plant. These radios are lightweight battery operated units which may be easily carried by personnel to any location on the plant site. Some of these portable radios are capable of communicating with the FM radio transceiver over a range of several miles.	No Change
188.	[4.6 Communications Equipment]  FPL Radio Paging System  Telephones in the FPL ITN System are interconnected to the FPL Radio Paging System. This system is capable of reaching beepers located within FPL's service area from Sebastien Inlet to the Miami-Dade/Monroe County line. Beepers are regularly assigned to key personnel in the Emergency Response Organizations as shown in the Emergency Response Directories, and additional beepers can be quickly assigned if required in an emergency. A beeper is also assigned to the Duty Call Supervisor.	Personnel within the Protected Area are notified of the emergency classification via the public address	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Personal pagers (beepers) are no longer used in the CEP.
189.	[4.6 Communications Equipment]  Company Radio System The Company radio system consists of a variety of fixed base radio equipment. The System Operations Power Coordinator's office, trouble dispatcher offices, service centers, power plants and mobile service		No Change

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	vehicles are equipped with one or more of these radio systems.  In the event of interruption of the on-site electric	service centers, power plants and mobile service vehicles are equipped with one or more of these radio systems.	
	service to the base radio stations, back up power is available to the equipment.  Transceivers are located in the Control Building	In the event of interruption of the on-site electric service to the base radio stations, back up power is available to the equipment.	
	Elevator vestibule. The operating set and battery back up units for these radios are located in the Unit 3 and 4 Control Room, TSC, and other on-site locations. These radios will provide backup communications between the Turkey Point Plant, Systems Operations Office, EOF, and Juno Beach Office.	Elevator vestibule. The operating set and battery back up units for these radios are located in the Unit 3 and 4 Control Room, TSC, and other on-site locations. These radios will provide backup communications between the Turkey Point Plant, Systems Operations Office, EOF, and Juno Beach Office.	
190.	[4.6 Communications Equipment]	[Annex – F.1.a]	No Change
	Portable Satellite Telephones  Various portable satellite telephones are available to supplement the fixed communication equipment in the plant. These telephones are lightweight battery operated units which may be easily carried by personnel on the plant site and function during an extended loss of AC power event.	Portable Satellite Telephones  Various portable satellite telephones are available to supplement the fixed communication equipment in the plant. These telephones are lightweight battery operated units which may be easily carried by personnel on the plant site and function during an extended loss of AC power event.	
191.	[4.6 Communications Equipment]	[Annex – F.1.a]	Non-RIE
	State Hot Ring Down Telephone The State Hot Ring Down telephone is installed in the Control Room TSC, and EOF. This system uses dedicated commercial telephone lines and is activated through predesignated three-digit access "telephone numbers". The initial notification of an emergency and other required notifications are made via this system to the State Division of Emergency Management (State Watch Office-Tallahassee) and the County Emergency Response Directors. Commercial telephone and (Satellite Communications System) serve as backups.	State Hot Ring Down Telephone The State Hot Ring Down telephone is installed in the Control Room, TSC, and EOF. This system uses	The CEP and Annexes are formatted in a 50.47(b) outline.  Notification process described in Section E.
192.		[Annex – F.1.a]	Non-RIE
	Emergency Satellite Communication System (EMNET) EMNET is an Emergency Satellite Communication System which is available in the Control Room, the Technical Support Center and the Emergency	Elinite i lo di Emorgono odionio odiminamodion	The CEP and Annexes are formatted in a 50.47(b) outline.  Notification process described in Section E.

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#	Current Emergency Plan	Common Emergency Plan	and Site Annex	Change Type
193.	Operations Facility. The initial notification of all emergencies and other required notifications to the State Division of Emergency Management (DEM) and the County's Department of Public Safety will be made via the Hot Ring Down telephone with EMNET as the second alternate communications pathway.  [4.6 Communications Equipment]	Operations Facility.  [Annex – F.1.a]		No Change
193.	NRC FTS Federal Telephone System	Annex		No Change
	Portions of this system are used to contact the NRC, such as the ENS and HPN. These phone links are described below:  • Emergency Notification System (ENS) - The ENS is used for initial notification by the licensee, as well as ongoing information on plant systems, status and parameters. The ENS is installed in each Control Room, TSC and EOF.  • Health Physics Network (HPN) - The HPN is used for communication with the licensee on radiological conditions (in-plant and off-site) and meteorological conditions, as well as their assessment of trends and needs for protective measures on site and off site. The HPN is located in the TSC and EOF.  • Emergency Response Data System (ERDS) - The ERDS is a direct near real-time electronic data link between the plant's on-site computer system and the NRC Operations Center. The ERDS provides for the automated transmission of a limited data set of selected plant parameters.	Portions of this system are usuch as the ENS and HPN. To described below:  Emergency Notification System as ongoing information on and parameters. The ENS Control Room, TSC and Eugene Health Physics Network (For communication with the conditions (in-plant and of conditions, as well as their and needs for protective numbers. The HPN is located in Emergency Response Date ERDS is a direct near real between the plant's on-site the NRC Operations Centrol the automated transmis of selected plant parameters.	sed to contact the NRC, These phone links are stem (ENS) - The ENS is by the licensee, as well plant systems, status is installed in each OF. HPN) - The HPN is used a licensee on radiological f-site) and meteorological assessment of trends neasures on site and off in the TSC and EOF. Ita System (ERDS) - The time electronic data link are computer system and er. The ERDS provides sision of a limited data set ers.	
194.	[4.7 Testing]	[CEP – F-3]		Non-RIE
	As discussed in Section 7.1, Exercises and Drills, communications equipment and procedures will be tested periodically as part of the FPL program of exercises and drills for maintaining emergency preparedness.	Communication systems test accordance with Table F-1.  Table F-1: Communica  Requirer	tion System Testing ments	The CEP and Annexes are formatted in a 50.47(b) outline. Provided content consistent with NUREG-0654 R2 element detail.
	proper derivou.	ORO Notification System  NRC FTS (ENS) Network	Monthly (a)  Monthly (b)	
		ERDS ERDS	Verify Transmission  Quarterly	

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#	Current Emergency Plan	<b>Common Emergency Plan</b>	and Site Annex	Change Type
		ERO Notification System	Per Elements N.4.h and N.4.i	
		Field Monitoring Teams Communication	Annually <sup>(a)</sup>	
		Telephone System	Frequent Use (c)	
		Station Radio System	Frequent Use (c)	
		Station PA System	Frequent Use (c)	
		ANS	per site specific ANS Design Report	
		(a) Test credit may be given drill.	by successful use in a	
		(b) NRC ENS in the Control TSC and EOF require m		
		(c) Communication systems testing frequency of "Fre the associated equipmer sufficient high regularity, additional testing is not r	that are listed with a quent Use" indicate that it is normally used at a such that separate	
195.	[Figure 4-1, Communications Interfaces]	, and the second		Non-RIE
				The CEP and Annexes are formatted in a 50.47(b) outline. Removed figure. NUREG-0654 R2 does not require a comm interface figure.
196.	[Table 4-1, Communications Responsibilities]			Non-RIE
				The CEP and Annexes are formatted in a 50.47(b) outline. Removed table. ERO responsibilities provided in Section
				B.1.a and Table B-1.
197.	[Table 4-2, Florida Nuclear Plant Emergency			Editorial
	Notification Form - See Form F439]			Actual ORO notification form not contained in current E-Plan or CEP.
_	5. Response to Accident Conditions			
198.	The classification is based on Emergency Action	[CEP - D]		Non-RIE
	Levels which are related to the instrument readings, and/or observations, of plant conditions as shown in the wall charts. This section discusses the	system and effluent paramet nuclear facility licensee, and response plans call for relian	state and county	The CEP and Annexes are formatted in a 50.47(b) outline. Section purpose descriptions

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	assessment of and response to these events.	provided by facility licensees for determinations of minimum initial offsite response measures.	replaced with planning standard wording.
199.	[5.1 Accident Assessment] Once an off-normal event has been detected and classified in accordance with the Emergency Action Levels, a process of continuing assessment will be initiated. System instruments and procedures which would be used, as appropriate, in the assessment process are described below. Specifications of instrumentation utilized for accident assessment are contained in procedures. Emergency Operating Procedures (EOPs) and Severe Accident Management Guidance (SAMG) should be used as required. Post accident sampling capabilities are also described in procedures.	[CEP – I] Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Section purpose descriptions replaced with planning standard wording. SAMG not included within scope of CEP.
200.	[5.1.1 Plant Release Pathways] The Turkey Point Plant is provided with systems for measuring radioactivity at potential effluent release points and within the primary Containment Buildings (See Table 3-2). The principal release point is the plant vent. The following systems may be sources of radiological effluent through the plant vent:  o Containment Purge System (both containments) o Gas decay tanks o Auxiliary Building Ventilation System o Unit 4 Spent Fuel Pit Ventilation o Radwaste Building Ventilation System o Cask Handling Facility Unit 4 o Steam Jet Air Ejector Vent System (Both Units) The plant vent monitor readings are available in the Control Room. In addition to the noble gas monitor(s), cartridges for analysis of particulates and iodine are included in the Plant Vent Radiation Monitoring System. These cartridges would be removed and analyzed using a multichannel analyzer. The Unit 3 spent fuel pit area and Unit 3 Cask Handling Facility are separately vented. The exhaust flow is monitored for noble gases, particulates, and iodine. Noble gas monitors provide continuous indication of concentration. Special cartridges	[CEP – I.1.a]  The magnitude of a release of radioactive material to the environment is primarily identified directly by effluent monitors. Survey and sample analysis may also be used to determine the magnitude of a release. Indirect means such as core damage estimates and release pathway assumptions may be used to estimate the magnitude of a release of radioactive material.  The isotopic composition of a release of radioactive material to the environment may be determined by; (1) effluent gaseous monitors, (2) survey and sample analysis, or (3) source term estimates based on core damage and release pathway assumptions.  Dose assessment model methods are capable of estimating source term and magnitude of gaseous releases from effluent monitors or plant parameter data and release rate projections.  [CEP – H.7]  4. Process and Area Radiation Monitors  Process Radiation Monitors (PRMs) measure radioactive noble gas, iodine, and particulate concentrations in gaseous effluent pathways and	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. Plant design equipment documented in the UFSAR. Additional site specific level of detail regarding ARM and PRM related to emergency response assessment is detailed int the EAL TBD.

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### **Common Emergency Plan and Site Annex** streams, and are used for event recognition and

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provided as part of the system are removed for multichannel analyses to determine particulate and iodine emissions.

The Steam Jet Air Ejector Exhaust Systems are provided with gross radioactivity monitors. These monitors would provide early indication of primary to secondary leakage.

The steam dump/safety exhausts are monitored for gross radioactivity. Particulate and iodine concentrations will be determined by analysis of grab samples from the main steam sample lines. Steam generator blowdowns are monitored for gross activity. Continuous readout is provided in the Control Room.

In addition to these effluent monitors, the plant is provided with an Area Radiation Monitoring System (See Table 3-3). This monitoring system employs detectors distributed throughout the plant, and detector indicators are provided locally and in the Control Room. The Area Radiation Monitoring System provides early indication of a release of radioactivity within the plant.

Also, the plant has a system of fire detectors with appropriate alarms in the Control Room to provide warning of a fire emergency.

declaration.

Area Radiation Monitors (ARMs) measure in-plant dose rates and allow in-plant dose rate determinations to be made remotely. This information may be used to aid in the determination of plant area accessibility for the protective action function.

Refer to Chapters 11 and 12 of the UFSARs for descriptions of the PRM and ARM systems.

7. Fire Detection Systems

The fire detection system, consisting primarily of fire/smoke detectors, control panel units, and annunciator panels, are used for event recognition and declaration. The fire detection equipment, alarms, and suppression equipment are described in detail in UFSAR Section 9.5 and in the sites' Fire Hazard Analysis Report.

## [5.1.2 On-Site Sampling Resources]

The capability is available at the Turkey Point Plant to obtain grab samples of the reactor containment atmosphere, the reactor coolant, and the containment sump.

To obtain grab samples of the containment atmosphere following an accident, a special removable gas sampling vessel is used in the existing containment sampling system. The removable vessel would be transported in a shielded container to the plant laboratory. At the laboratory, a portion of the gas Each NextEra site has arrangements to obtain and would be drawn from the vessel, and the radioisotopic content determined by appropriate analytical techniques. Plant procedures provide instructions for sample acquisition, transportation, and analysis. Reactor coolant and containment sump grab samples

[CEP - H.7]

# 6. Sampling Systems

Liquid and gaseous sampling systems, consisting of normal sampling systems and panels located throughout the unit(s) at each site, are used for event recognition and declaration. Refer to Chapter element and fleet description. 9 of the UFSARs for descriptions the sites sampling Plant design equipment documented systems.

[CEP - I.4.a]

analyze highly radioactive samples from the reactor coolant system, containment atmosphere and sump, and spent fuel pool.

[Annex - I.4.a]

### Non-RIE

The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2

in the UFSAR.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	can also be taken following an accident. Details regarding sample acquisition, transportation, and analysis are described in plant procedures.	Changes have been made to reflect the NRC approved License Amendment Request received from the NRC via letter dated 02/13/01. The NRC issued Amendment Nos. 211 and 205 (Facility Operating Licenses DPR-31 and DPR-41). The amendments delete TS Section 6.8.4.d, "Post Accident Sampling," and thereby eliminate the requirements to have and Maintain the Post-Accident Sampling System at PTN.	
		Chemistry procedures describe post-accident contingency plans for obtaining Reactor Coolant, and Residual Heat Removal, and Containment Sump samples. Procedures are in place to assess core damage under accident conditions	
202.	Air samples will be collected using portable air samplers in accordance with a plant procedure. Portable air samplers are located such that time required to obtain results is minimized for critically manned areas (e.g., Control Room, Technical Support Center). Silver zeolite sample cartridges are stored on site. To preclude interferences by noble gas adsorption, only silver zeolite cartridges will initially be used to sample critically manned areas (e.g., Control Room, Technical Support Center, other areas which require personnel to be present). Collected samples will be transported promptly to the lab. If necessary, an alternate location will be established using portable equipment in a low background area outside the Radiation Controlled Area.  Samples are to be analyzed in accordance with approved procedures.	[CEP – I.7]  NextEra field monitoring equipment has the capability to detect and measure airborne radioiodine	Non-RIE  Field monitoring capability reworded for consistency with NUREG-0654 R2 elements.  Habitability response actions described in other elements
203.	[5.1.3 Meteorological Systems] Meteorological data is required to make estimates of off-site radiation exposure in the event of a release of gaseous radioactivity. Measurement of three meteorological parameters are required to make estimates of atmospheric dispersion, an essential part of a radiation exposure calculation. The parameters are wind speed, wind direction, and a measure of atmospheric stability.  Meteorological data is collected at the Turkey Point	Edon NextErd Site has a permanent on site	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. Plant design equipment documented in the UFSAR.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Land Management Site 10 meter tower (1.2 miles southwest), the South Dade Site 60 meter tower (7 miles southwest) or obtained directly from the National		
	Weather Service in Miami. Table 5-1 summarizes the		
	available data. Data which represents primary and		
	backup sources are summarized on Table 5-2. As indicated in Table 5-1, values of the key		
	meteorological parameters are provided for the Turkey		
	Point Plant and South Dade Site meteorological		
	installations. These readouts are provided		
	continuously, and the data is directly available at the		
	Control Room, Technical Support Center (TSC), and the Emergency Operations Facility (EOF) via		
	Distributed Control System (DCS).		
	Meteorological data is provided to the State via initial		
	and follow-up communications utilizing Table 4-2, as		
	well as response to direct inquiries from DEM and Florida Health Bureau of Radiation Control (FH -		
	BRC). The EOF and NRC can receive timely		
	meteorological information through the TSC, upon		
	request or through DCS.		
204.		1	Non-RIE
	As discussed in Section 5.1.3 certain meteorological parameters are required for the calculation of off-site	The magnitude of a release of radioactive material to	The CEP and Annexes are
	radiation exposure from airborne releases. Additional		formatted in a 50.47(b) outline.
	essential pieces of information are the rate of release		Wording altered to address the level of detail of the NUREG-0654 R2
	and isotopic composition of the released radioactivity.	Indirect means such as core damage estimates and	element and fleet description.
	If radioactivity were released from a monitored vent, then a direct measure of the release rate would be	release pathway assumptions may be used to	
	available. Monitored release points are discussed in	estimate the magnitude of a release of radioactive	
	Section 5.1.1. Based upon certain assumptions,	material.	
	release rate can be determined using 0-EPIP-20126,	The isotopic composition of a release of radioactive material to the environment may be determined by; (1)	
	Off-Site Dose Calculations -Manual Method or 0-EPIP-	effluent gaseous monitors, (2) survey and sample	
	20125, Off-Site Dose Assessment Using the Unified RASCAL Interface (URI), for all monitored release	analysis, or (3) source term estimates based on core	
	points and grab samples.	damage and release pathway assumptions.	
	In event of a loss of coolant accident, the containment	Dose assessment model methods are capable of	
	radiation monitors would provide the first indication of	estimating source term and magnitude of gaseous	
	the magnitude or existence of radioactivity in the	releases from effluent monitors or plant parameter data and release rate projections.	
	containment. These monitors can be used to determine the concentration of radionuclides based	[CEP – I.1.b]	
	determine the concentration of radionacides pased	[[OLI = 1.1.b]	

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upon the isotopic mixes assumed for the accident described in the Updated Final Safety Analysis Repor (UFSAR). Additional information about the isotopic composition of the airborne radioactivity would be derived from isotopic analysis of a containment atmosphere sample.

Procedures have been developed to assist the plant staff in estimating release rates and isotopic content for releases from the various plant vents.

#### **Common Emergency Plan and Site Annex**

NextEra uses site specific versions of the Unified RASCAL Interface (URI) off-site dose projection computer model. The underlying dose assessment model in URI is the NRC RASCAL 4 model, based on the methods and equations documented in NUREG-1940.

**Change Type** 

The URI model provides off-site radiological dose and dose rate estimates based on near real time or hypothetical inputs. Projected dose is based on EPA-400-R92-001 dose conversion factors and provided as; (1) the total effective dose equivalent, or TEDE (the sum of the effective dose equivalent from immersion, 4 days of ground deposition, and the committed effective dose equivalent from inhalation), and (2) the committed dose equivalent to the thyroid (CDE thyroid).

URI dose projection results are given for various locations from the site boundary to 10 miles. URI is capable of providing dose assessment results for multiple release points from the site.

URI dose projection results and field monitoring readings are used in assessing radiological EALs and PARs.

[CEP - 1.4]

Source term present in reactor coolant, containment atmosphere, and spent fuel pool area atmosphere are estimated using effluent, process and area radiation monitor readings, comparison of plant conditions against design basis event scenarios, sample analysis and environmental survey results, and plant parameter indications as inputs into the dose assessment and core damage assessment processes.

[CEP - I.6]

NextEra sites use an industry recognized dose assessment model to make timely assessments of the actual or potential magnitude and locations of any radiological hazards through gaseous release pathways. Personnel qualified in dose assessment are available on shift, remotely, and in the EOF. Dose

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		assessment results and field monitoring readings assist in evaluating appropriate ECLs based on radiological EALs, and for developing any related PARs.	
		The actual or potential magnitude of liquid radiological releases with regard to the ECLs are determined by liquid effluent monitors, direct area surveys, or sample analyses.	
		With regard to the ingestion pathway, field monitoring teams are used to obtain liquid effluent samples from radioactive liquid releases. Sample results are used in conjunction with Offsite Dose Calculation Manual (ODCM) methods to estimate potential ingestion exposure in support of EAL determination. Also, liquid release monitoring activities are coordinated and sample results shared with ORO agency personnel to assist their determination in intermediate phase protective actions.	
205.	[5.1.5 Exposure and Dose Rate Determination] One of the uses of radiation monitors and meteorological instrumentation is the estimation of off-site radiation exposures. An estimate of doses is needed so that responsible governmental agencies can use this information to plan protective action. 0-EPIP-20126, Off-site Dose Calculations - Manual Method or 0-EPIP-20125, Off-Site Dose Assessment Using the Unified RASCAL Interface (URI), provides the details of how initial dose estimates are determined. In particular, current meteorological data, process monitor data, and containment high range radiation monitor readings are used in conjunction with tables for estimating doses under actual conditions. Dose calculations will be updated periodically during the course of the accident and the result will be provided to State and County authorities for their use in evaluating the need for protective action. Figure 5-1 presents the protective action guides to be used for making recommendations. These are consistent with Environmental Protection Agency (EPA) Protective Action Guides (PAGs). Initial dose calculations are	[CEP – I.1.b]  NextEra uses site specific versions of the Unified RASCAL Interface (URI) off-site dose projection computer model. The underlying dose assessment model in URI is the NRC RASCAL 4 model, based on the methods and equations documented in NUREG-1940.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks.

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performed by the chemistry representative who is dispatched to the Control Room at the onset of the accident. Refined dose estimates would be prepared by the Chemistry Department personnel reporting to the TSC or by personnel in the Emergency Operations Facility (if operational) using available tables and/or an NextEra sites use an industry recognized dose interactive computer program which presents results and protective action recommendations in a tabular format. Default values based on the FSAR have been established and can be utilized if assessment instrumentation is not available (offscale or inoperable) and field sample analysis has not yet been assessment results and field monitoring readings completed.

## **Common Emergency Plan and Site Annex**

URI dose projection results and field monitoring readings are used in assessing radiological EALs and PARs.

**Change Type** 

[CEP - I.6]

assessment model to make timely assessments of the actual or potential magnitude and locations of any radiological hazards through gaseous release pathways. Personnel qualified in dose assessment are available on shift, remotely, and in the EOF. Dose assist in evaluating appropriate ECLs based on radiological EALs, and for developing any related PARs.

The actual or potential magnitude of liquid radiological releases with regard to the ECLs are determined by liquid effluent monitors, direct area surveys, or sample analvses.

With regard to the ingestion pathway, field monitoring teams are used to obtain liquid effluent samples from radioactive liquid releases. Sample results are used in conjunction with Offsite Dose Calculation Manual (ODCM) methods to estimate potential ingestion exposure in support of EAL determination. Also, liquid release monitoring activities are coordinated and sample results shared with ORO agency personnel to assist their determination in intermediate phase protective actions.

[CEP – J.6]

NextEra sites have developed PARs, in accordance with agreements made with the state agencies, for the plume exposure pathway EPZ that include evacuation, sheltering, and recommendations for radioprotective Potassium lodide use based on the following:

- NUREG-0654/FEMA-REP-1, Supplement 3, Guidance for Protective Action Strategies, November 2011
- EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents.

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		May 1992 • Guidance for Industry, KI in Radiation Emergencies,	
		<ul> <li>Questions and Answers, FDA, December 2002</li> <li>Potassium Iodide as a Thyroidal Blocking Agent in Radiation Emergencies, FDA Guidance, November 2011</li> </ul>	
		PARs for the general public will be based on plant conditions and/or offsite dose assessment results.	
		PARs beyond the 10-mile EPZ will be developed on an "ad hoc basis" from projected or measured dose in excess of EPA PAGs. Because dose projection accuracy is limited by distance, actual field measurements are used to corroborate projections	
		before issuing PARs in areas outside the 10-mile EPZ.	
	[5.1.6 Off-site Monitoring] <u>Dosimetry</u> Florida Health - Bureau of Radiation Control (FH - BRC) maintains a system of approximately 35  Dosimeter of Legal Record (DLR) stations in the vicinity of Turkey Point Plant. Stations are provided in each 22.5° land sector at the 1-mile (approximate), 5-mile (approximate), and 10-mile (approximate) radii. At the 10-mile radius, stations are located with special emphasis on the more densely populated area.		Non-RIE Removed wording. ORO DLR descriptions are contained in their respective E-Plans.
207.	provided by: 1) the Radiation Protection counting room facilities; 2) St. Lucie Plant Radiological facilities; 3) the State of Florida's Mobile Emergency Radiological Laboratory. Analysis of off-site environmental samples will be performed at the State's Mobile Emergency Radiological Laboratory. This mobile lab can be in position near the site within 6 to 8 hours of notification. A FH - BRC representative dispatched to the EOF will coordinate all State off-site field monitoring data and sample media.	NextEra has radiological laboratories located at each site. The site laboratories are the central point for receipt and analysis of onsite samples and includes equipment for chemical and radiological analyses. The	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		Environmental sampling will be augmented by the	
		State's Mobile Emergency Radiological Laboratory	
		(MERL) within approximately 6 hours of notification.	
		Analysis of off-site environmental samples will be	
		performed at the MERL. A FH - BRC representative	
		dispatched to the EOF will coordinate all State off-site	
		field monitoring data and sample media.	
208.	[5.1.6 Off-site Monitoring]		Non-RIE
	Field Monitoring - State		Removed wording.
	The State Plan discusses the State role in accident		ORO field monitoring descriptions
	assessment. It describes agencies and their missions,		are contained in their respective E-
	specialized personnel, special equipment, and other		Plans.
	matters related to field monitoring within the Plume		
	Exposure Pathway Emergency Planning Zone (EPZ).		Field monitor coordination
	The State Plan also discusses, in further detail, the		description contained in other
	capability and resources for field monitoring.		elements.
	Field team compositions, transportation,		
	communications, equipment and estimated		
	deployment times are included in the State Plan.		
	Transportation of field teams is also discussed in the		
	State Plan. Field team communications are described		
	in the State Plan, as well as monitoring equipment,		
	composition of field teams and deployment times.		
	County Plans also discuss accident assessment. For		
	example, the Miami-Dade County Plan indicates that		
	the County Health Department Director will cooperate		
	with Florida Health Bureau of Radiation Control with		
	respect to accident assessment procedures. The		
	County Plan also indicates that the Miami-Dade		
	County Office of Emergency Management will be		
	involved in assessment activities as well.		
	The State Plan discusses the measurement of iodine		
	in air, and the use of such measurements in		
	assessment activities.		
209.	[5.1.6 Off-site Monitoring]	[CEP - I.1.c]	Non-RIE
	Field Monitoring - Plant	Environmental surveys inside and outside the	The CEP and Annexes are
	Plant procedures provide guidance for activation of	protected area are performed by Field Monitoring	formatted in a 50.47(b) outline.
	emergency field monitoring teams, dispatching these	Team members under the direction of the EOF RP	` '
	teams throughout the plume EPZ and	Coordinator.	Wording altered to address the level of detail of the NUREG-0654 R2
	communications. Equipment and instrumentation is		
	maintained for two off-site monitoring teams.	Field monitoring teams are directed to track and	element and fleet description.

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# **Change Type**

Equipment and instrumentation is maintained in the OSC for numerous on-site monitoring teams. The equipment includes air samplers, filters, silver zeolite cartridges, sample bags, forms, log books, phone lists, performed at pre-identified locations or other maps, and procedure packs. Instrumentation includes single channel gamma analyzer (sodium iodide crystal during the event. Samples taken by the offsite type) with the capability of detecting radioiodine concentrations of at least 10-7 microcuries/cc in the field. Other instrumentation includes ion chamber. survey monitors and high range gamma monitors. Communications will be maintained with the TSC Radiation Protection Supervisor by portable two-way radios or cellular telephones. Plant procedures also include information on sampling techniques, measurement of airborne concentrations of radioiodine, direct radiation dose rates, transportation of teams, expected deployment times, and communications.

evaluate a radioactive plume by monitoring radiation levels and by obtaining and analyzing air samples. Field monitoring surveys and sampling may be geographic locations within the EPZ determined monitoring teams will be evaluated further by one of the available laboratory facilities described in Element C.4.

[CEP - I.7]

NextEra field monitoring equipment has the capability to detect and measure airborne radioiodine concentrations as low as 1E-7 µCi/cc in the presence of noble gases. Air samples will be taken with portable air sampling equipped with a Silver Zeolite or equivalent cartridge and particulate filter. Interference from the presence of noble gas and background radiation is minimized by ensuring that monitoring teams move to areas of low background prior to analyzing the sample cartridge.

Air sample results can be estimated in the field through the use of portable monitors. The samples can be subsequently analyzed for greater precision by the laboratory facilities described in Element C.4.

lin Section H. Refer to Analysis #1 and Analysis

Communications systems described

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#2 for a detailed comparison evaluation of the ERO positions, functions/tasks.

# **210.** [5.1.6 Off-site Monitoring] Coordination of Sampling Data

To assure that information concerning FPL off-site radiological assessment is exchanged, arrangements have been made for Florida Health Bureau of Radiation Control (FH - BRC) representatives to be stationed at the EOF. Direction and control of field operations for the FH -BRC will be provided by the State Health Physics Supervisor, who will conduct/supervise accident assessment and response of the field teams from a post at the EOF. Office space and communications are provided therein and have been described in Emergency Plan Implement Procedures. Prior to the arrival of FH - BRC personnel, coordination of this information will be through follow-up communications with DEM and the

[CEP - I.9]

NextEra maintains equipment for the utility field monitoring teams. Methods to monitor a radioactive plume include establishing peak centerline values and immersion areas. Monitoring strategies may include the traversing of plumes when road networks and exposure rate permit. Additionally, local field sampling and monitoring points are specified to support prepositioning of teams or use in comparison with dose projection results.

Data from the NextEra field monitoring teams is compared to data provided by state field monitoring teams that may be dispatched into the area. Data collected before state field monitoring teams are in the field is made available to state dose assessment personnel.

#### Non-RIE

The CEP and Annexes are formatted in a 50.47(b) outline.

Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.

Communications systems described in Section H.

Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks.

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	Plume Exposure EPZ counties.  DOE off-site monitoring assistance, if required, will be requested by the DEM in consultation with FH - BRC.  Lead responsibility for coordination with Department of Energy (DOE) is assigned to FH - BRC.		
211.	[5.2 Protective Response]	[CEP – J]	Non-RIE
	This section describes the protective actions on site, and the data provided to assist the State and County in determining appropriate off-site protective actions.	A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. In developing this range of actions, consideration has been given to evacuation, sheltering, and, as a supplement to these, the prophylactic use of potassium iodide (KI), as appropriate. ETEs have been developed by applicants and licensees. Licensees shall update the ETEs on a periodic basis. Guidelines for the choice of protective actions during an emergency, consistent with federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.	The CEP and Annexes are formatted in a 50.47(b) outline. Section purpose descriptions replaced with planning standard wording.
212.	[5.2.1 Protective Actions]	[CEP – J.1]	Non-RIE
	evacuation or the affected area (localized evacuation or site evacuation), monitoring of all personnel who were in the affected area, and	NextEra maintains procedures to provide for a range of protective actions for all areas controlled by the site. Protective actions have been developed for radiological incidents and to protect personnel during hostile actions directed at the site.	The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.
	decontamination as required. Individuals remaining or arriving on site during an emergency will be provided protective equipment as prescribed by the TSC Radiation Protection Supervisor, the OSC RP Supervisor, and plant	Sitewide notifications and announcements are routinely made using the Public Address (PA) system. Personnel on site are notified of a declared emergency through the PA system.	
	procedures. Florida Power and Light Company will make Potassium Iodide (KI) available for use as a thyroid blocking agent. Use of KI will be in accordance with plant procedures.  Control Room personnel are in an isolated	Visitors within the Protected Area are escorted by badged individuals. The escort is responsible for controlling and directing their assigned visitors regarding actions required by any announcements and alarms.	
	environment and need protective equipment to leave the Control Room or if the Control Room becomes contaminated. An emergency kit with all necessary equipment is present inside the Control Room and is	Security personnel are used, as available, to augment PA announcements and to check OCA areas for remaining individuals.	
	to be used for this purpose.	[CEP – J.1.a]	
	Onsite protection of employees during hostile action	Site evacuation is required following a Site Area	

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	involves a combination of restricted movement, movement to safe locations, and site evacuation depending on the nature of the hostile event and advance warning. Site procedures provide specific actions to take during hostile action based events.	Emergency or General Emergency unless delayed due to safety issues. The sounding of an alarm over the public address system occurs for the initiation of site evacuation.  When a site evacuation occurs, ERO and other	
		essential personnel respond to their designated response facilities/areas. Non-essential personnel inside the Protected Area typically exit to the OCA by following normal RP and Security processes and proceed to a designated assembly area. Further evacuation of non-essential personnel inside the OCA occurs as warranted for the particular site.	
		A process is in place to perform a rapid evacuation of the Protected Area without onsite monitoring and OCA assembly if conditions warrant. Monitoring in this instance is performed at an offsite location.	
	[5.2.1 Protective Actions]	[Annex – K.1.e]	No Change
	<u>Decontamination</u>	Personnel decontamination facilities are available in	
	Personnel decontamination facilities are available in	four locations. Their use will be governed by the	
	four locations. Their use will be governed by the	nature of the incident.	
	nature of the incident.	1) FPL Dress Out Building - Showers and sinks	
	FPL Dress Out Building - Showers and sinks available for the decontamination of personnel with no (or minor) injuries.	available for the decontamination of personnel with no (or minor) injuries.	
	<ul> <li>Baptist Hospital of Miami - Decontamination shower and contaminated injury treatment room.</li> <li>For interim use to treat severely injured personnel.</li> <li>Located approximately 30 miles north of the</li> </ul>	Baptist Hospital of Miami - Decontamination shower and contaminated injury treatment room. For interim use to treat severely injured personnel. Located approximately 30 miles north of PTN.	
	Turkey Point Plant. 3) Mercy Hospital - Contaminated Injury Treatment Room. For interim use to treat severely injured personnel. Located approximately 30 miles north	<ol> <li>Mercy Hospital - Contaminated Injury Treatment Room. For interim use to treat severely injured personnel. Located approximately 30 miles north of PTN.</li> </ol>	
	of Turkey Point Plant. 4) Decontamination Facility - The Florida City Substation has personnel decontamination	Decontamination Facility - The Florida City     Substation has personnel decontamination     capabilities available.	
	capabilities available.  Vehicles will be decontaminated with the use of Miami-Dade County Fire Department equipment.	Vehicles will be decontaminated with the use of Miami-Dade County Fire Department equipment.	
	Extra clothing for personnel whose personal clothing has become contaminated is available in the form of	Extra clothing for personnel whose personal clothing has become contaminated is available in the form of disposable garments.	

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	disposable garments. Contamination monitoring is performed through the use of count rate instruments with beta-gamma sensitive probes. Methods for decontamination and monitoring are described in plant procedures. Contamination monitors and procedures are adequate for assessing potentially contaminated wounds either on site or at the decontamination facility.	Contamination monitoring is performed through the use of count rate instruments with Beta-gamma sensitive probes.  Methods for decontamination and monitoring are described in plant procedures. Contamination monitors and procedures are adequate for assessing potentially contaminated wounds either on site or at the decontamination facility.	
214.	[5.2.1 Protective Actions]		Non-RIE
	Off-site		The CEP and Annexes are
	Off-site areas are the responsibility of the respective County Emergency response agencies, the Florida		formatted in a 50.47(b) outline.
	Health Bureau of Radiation Control (FH - BRC) and		Removed wording not applicable to
	the Division of Emergency Management of the State		a NUREG-0654 R2 licensee related element.
	of Florida. Control of radioactive contamination and		olement.
	public safety in off-site areas are responsibilities of these governmental agencies, and their criteria for		
	implementing protective actions may be found in the		
	Florida Radiological Emergency Plan for Nuclear		
	Power Plants (see Appendix A). Decontamination of off-site areas will be performed under the direction of		
	the FH - BRC.		
215.	The State Plan discusses evacuation time estimates	[CEP – J.7]	Non-RIE
	and their use in determining protective actions. FPL will perform an evacuation time estimate update	NextEra offsite protective action recommendation	The CEP and Annexes are
	using the guidance in NUREG/CR7002 and the	strategies, informed by the ETE report, have been developed using guidance provided in NUREG-	formatted in a 50.47(b) outline.
	requirements in 10CFR50, Appendix E, Sections IV.3		Wording altered to address the level of detail of the NUREG-0654 R2
	and IV.4. FPL will work with the Miami-Dade, Monroe	Protective Action Strategies, in coordination with the	element and fleet description.
	County, and the State of Florida to formulate and maintain a protective action strategy using the	state and local agencies.	
	applicable portions of NUREG 0654 Supp III.	[CEP – J.8.a]	
	The Miami-Dade County Plan and the Monroe County	The most recent ETEs are incorporated by reference	
	Plan also discuss evacuation times.	into this emergency plan. Refer to the site annexes for specific reference to the ETE study.	
		Updated ETE studies will be submitted to the NRC	
		under 10 CFR 50.4 no later than 365 days after	
		NextEra determines that the criteria for updating the ETE have been met and at least 180 days before	
		using it to form protective action recommendations	
		and providing it to state and county governmental	

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		authorities for use in developing offsite protective action strategies.	
		During the years between decennial censuses NextEra will estimate EPZ permanent resident population changes once a year, but no later than 365 days from the date of the previous estimate, using the most recent U.S. Census Bureau annual resident population estimate and state/county government population data, if available. NextEra will maintain these estimates so that they are available for NRC inspection during the period between decennial censuses and will submit these estimates to the NRC with any updated ETE report.	
		The criteria that require a full update to the site ETE study is as follows:	
		The availability of the most recent decennial census data from the U.S. Census Bureau;	
		OR	
		2. If at any time during the decennial period, the EPZ permanent resident population increases such that it causes the longest ETE value for the 2-mile zone or 5-mile zone, including all affected emergency response planning areas, or for the entire 10-mile EPZ to increase by 25 percent or 30 minutes, whichever is less, from the currently NRC approved or updated ETE.	
216.	Recommendations for protective actions will be made	[CEP – J.6]	Non-RIE
	by the Emergency Coordinator (or RM if EOF is operational) using Figure 5-1. The development of this	NextEra sites have developed PARs, in accordance with agreements made with the state agencies, for the	The CEP and Annexes are formatted in a 50.47(b) outline.
	figure was based upon consideration of the severity of an accident (emergency class) and, when actual or estimated off-site doses are available, the EPA Protective Action Guides in conjunction with plant conditions.		Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

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		Questions and Answers, FDA, December 2002 • Potassium Iodide as a Thyroidal Blocking Agent in Radiation Emergencies, FDA Guidance, November 2011	
		PARs for the general public will be based on plant conditions and/or offsite dose assessment results.	
		PARs beyond the 10-mile EPZ will be developed on an "ad hoc basis" from projected or measured dose in excess of EPA PAGs. Because dose projection accuracy is limited by distance, actual field measurements are used to corroborate projections before issuing PARs in areas outside the 10-mile EPZ.	
217.	[5.2.2 Owner Controlled Area Warning and		Non-RIE
	Response] During an emergency, the relocation of persons may be required in order to prevent or minimize exposure		The CEP and Annexes are formatted in a 50.47(b) outline.
	to radioactive materials. An evacuation is the orderly, rapid, and safe withdrawal of all personnel from an area affected by an emergency condition.		Wording removed. Relocation and evacuation descriptions provided with their associated element.
218.	Evacuation	[CEP – J.1.a]	Non-RIE
	Evacuation is the primary protective measure anticipated for personnel within the Protected Area not	1	The CEP and Annexes are
		la a a a a a a a a a a a a a a a a a a	formatted in a 50.47(b) outline.
	filling Emergency Response Organization positions. Contractors not having an emergency response function and visitors are normally evacuated at the Alert or higher classification. Evacuation of all other non-essential personnel, including personnel not required for the shutdown of the fossil units, occurs at the Site Area Emergency and General Emergency. However, the Emergency Coordinator shall use good judgment prior to moving personnel from the Owner Controlled Area.  Conditions such as security events, release status, release duration, plant conditions and meteorological conditions should be evaluated.  Owner Controlled Areas outside the Protected Area are evacuated, if conditions warrant, of all non-FPL personnel at an Alert or higher emergency classification. Security is responsible for evacuation implementation per applicable EPIPs and SFIs while	due to safety issues. The sounding of an alarm over the public address system occurs for the initiation of	Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.

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219.	the Emergency Coordinator is responsible for the decision to evacuate. Local Area Evacuations are performed as required for specific areas of the site experiencing hazardous conditions (fire, radiological, toxic gas, etc.). At a minimum, an announcement over the Public Address system will be made, ordering the Local Area Evacuation. Personnel in or around the affected area are instructed to stay clear.  Accountability At the declaration of a Site Evacuation (usually Site Area Emergency or General Emergency), all non-essential personnel are evacuated. All individuals in the Protected Area are accounted for and names of personnel not accounted for are established within 30 minutes of the initiation of the Site Evacuation. Once established, accountability within the Protected Area is maintained throughout the event. Upon notification that personnel are missing, the Emergency Coordinator shall ensure that Search and Rescue Operations are initiated. Accountability is coordinated by the TSC Security Supervisor and the results are forwarded to the Emergency Coordinator.	process to use them, have been identified through coordination with local emergency management personnel.  The site evacuation process takes into consideration meteorological and radiological data, weather and other travel hazards.  On-site personnel will evacuate the site when directed. Site evacuation routes and evacuation locations are contained in the site annexes.  [CEP – J.4]  The emergency alarm, together with the public address system, is used to alert and notify on-site personnel of the need for assembly at a Site Area or General Emergency classification level (or earlier at the discretion of the Emergency Director).	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.
220.	[5.2.3 Off-site Area Protective Measures]	[CEP – J.6]	Non-RIE
	An off-site area evacuation is the orderly withdrawal of all persons from the portion of the public areas surrounding the plant which have been affected by the emergency. The criteria for the initiation of the evacuation are determined by the Florida Health Bureau of Radiation Control as specified in the State of Florida Radiological Emergency Plan. The State Plan describes evacuation measures and provides	lwith agreements made with the state agencies, for the	The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. Removed wording not applicable to a NUREG-0654 R2 licensee related element.

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maps indicating designated evacuation routes. The Emergency Coordinator (RM when EOF is operational) will recommend off-site protective actions based upon the criteria shown in Figure 5-1. The Miami-Dade and Monroe County Emergency Response Directors and the State Division of Emergency Management will be responsible for the direction and implementation of the necessary protective actions as specified in the Florida Radiological Emergency Management Plan for Nuclear Power Plants, including notification and coordination with other State and Local assistance agencies.

The State Plan describes the bases for the choice of recommended actions for the Plume Exposure Pathway EPZ during emergency conditions. It will be the responsibility of the Miami-Dade and Monroe County Emergency Response agencies to notify the general public if an evacuation is warranted This will be accomplished as discussed in Sections 5.2.4 and 5.2.8. Figure 5-3 is a map of the Miami-Dade and Monroe Country Evacuation Routes. Descriptions of evacuation routes, monitoring points, and reception centers are provided in the State Plan. The Emergency Classification System used by the State includes certain actions which are automatically triggered upon the occurrence of designated emergency classifications. These are discussed in the State Plan. Other protective action decisions are made on the basis of information which becomes available as a result of accident assessment. Assessment actions which would form a basis for recommendations are discussed in the State Plan. The State and County Plans point out that EPA Protective Action Guides will be an important basis for Protective Action Recommendations (PARs). The Bureau of Radiation Control Standard Operating Procedures discuss the process by which State officials collect information and make recommendations. The Bureau of Radiation Control Standard Operating Procedures also discuss

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- **Change Type**
- EPA-400-R-92-001. Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, May 1992
- Guidance for Industry, KI in Radiation Emergencies, Questions and Answers, FDA, December 2002
- Potassium Iodide as a Thyroidal Blocking Agent in Radiation Emergencies, FDA Guidance, November 2011

PARs for the general public will be based on plant conditions and/or offsite dose assessment results.

PARs beyond the 10-mile EPZ will be developed on an "ad hoc basis" from projected or measured dose in excess of EPA PAGs. Because dose projection accuracy is limited by distance, actual field measurements are used to corroborate projections before issuing PARs in areas outside the 10-mile EPZ. [CEP - J.9]

Applicable plume exposure pathway EPZ PARs of evacuate and shelter are developed at the General Emergency classification level and provided to the ORO personnel responsible for making protective action decisions.

PARs are communicated using the initial notification form and process. See Section E for a discussion of emergency notification.

[CEP - J.8.a]

The most recent ETEs are incorporated by reference into this emergency plan. Refer to the site annexes for specific reference to the ETE study.

Updated ETE studies will be submitted to the NRC under 10 CFR 50.4 no later than 365 days after NextEra determines that the criteria for updating the ETE have been met and at least 180 days before using it to form protective action recommendations and providing it to state and county governmental authorities for use in developing offsite protective action strategies.

During the years between decennial censuses

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77	assessment actions which would form a basis for recommendations.  The Evacuation Time Estimate has been developed for the Turkey Point plume exposure pathway emergency planning zone (EPZ) using NUREG/CR-7002. Updates will be performed in accordance with the requirements of 10 CFR 50 Appendix E, Section IV.	NextEra will estimate EPZ permanent resident population changes once a year, but no later than 365 days from the date of the previous estimate, using the most recent U.S. Census Bureau annual resident population estimate and state/county government population data, if available. NextEra will maintain these estimates so that they are available for NRC inspection during the period between decennial censuses and will submit these estimates to the NRC with any updated ETE report.  The criteria that require a full update to the site ETE study is as follows:  1. The availability of the most recent decennial census data from the U.S. Census Bureau;  OR  2. If at any time during the decennial period, the EPZ permanent resident population increases such that it causes the longest ETE value for the 2-mile zone or 5-mile zone, including all affected emergency response planning areas, or for the entire 10-mile EPZ to increase by 25 percent or 30 minutes, whichever is less, from the currently NRC approved	Officings Type
221.	[5.2.4 Public Warning and Information] The State Plan, provides information on warning of the public and discusses warning procedures for Miami-Dade and Monroe counties. Prompt notification systems are discussed therein. FPL has purchased and installed an alert (siren) and notification system as described in Section 5.2.8.  Notification to the population and arrangements with public communications media are described in the State Plan. The State Plan provides the guidance for keeping the public informed about the potential hazards, emergency response, and protective measures that can be taken to minimize or avoid public health effects. The State Plan also provides procedures for the timely and accurate collection, coordination, and dissemination to the public of such information. Information releases will be coordinated	Detailed ANS information is maintained in the ANS design report for each site as listed in the site annexes.  [Annex – E.2]  PTN ANS used to alert and notify the general public within the plume exposure pathway EPZ is described as follows.  1. General Description  The ANS (activated by the OROs) is the primary	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. Content describing PTN ANS is included in the FEMA approved ANS design report. Removed wording not applicable to a NUREG-0654 R2 licensee related element.

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with Federal and Local agencies. Means of providing notification to the general public will include the activation of the Public Notification System, which may include existing outdoor siren systems, the Emergency Alert System, the National Oceanic and Atmospheric Administration Very High Frequency Radio Network, participating local radio and television stations, and route alerting. The State Plan also provides for releases to be used for media. These are consistent with FPL's classification scheme. These are examples of specific prior arrangements that have been made to use public communication media for issuing emergency instructions to the public. The State Plan discusses annual orientation of the media. The State Plan also indicates TV and radio stations which would be used to alert the public.

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Alerting, warning, and notification of the public are actions taken by government agencies to provide prompt instructions to the public. As such. government agencies will take actions for areas in the EPZ not covered by ANS, such as waterways, unpopulated wooded areas, military installations, and the like; as described in ORO emergency operating plans, guidelines, and procedures. Should the primary alerting or notification system

fail, ORO plans maintain the FEMA approved backup alert process.

2. Concept of Activation and Operation

ANS is available and operational in the 10-mile EPZ. The ANS provides an alerting signal to essentially 100% of the population on an area-wide basis throughout the 10-mile EPZ within 15 minutes from the time the cognizant OROs have determined the need for such alerting exists. System testing is used to satisfy FEMA requirements ensuring adequate coverage of the population within the 10mile EPZ. The emergency plans of each state include evidence of EAS preparation for emergency situations and the means for activating the system. ANS performance is verified via automated reports generated after activation or testing.

PTN is responsible for ensuring the operability of the ANS.

To ensure ANS is maintained, the system is tested on a periodic basis as described in Element F.3 that meets or exceeds FEMA guidance. PTN personnel are notified of failed tests and initiate corrective actions to return ANS equipment to full operational readiness in a timely manner to meet FEMA operability requirements as referenced in the FEMA Radiological Emergency Preparedness Program Manual.

Detailed information on the FEMA approved system used to alert and notify the general public is

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		maintained in EP-PTN-135, Alert and Notification	
222.	[5.2.5 Population Exposure Estimates]	System Design Report.	Non-RIE
222.	Population exposure estimates are discussed in the State Plan. Bureau of Radiation Control Standard Operating Procedures discuss the projected dose calculation process and assessment and monitoring in the Ingestion Exposure Pathway EPZ - Bureau of Radiation Control Standard Operating Procedures are used to determine dose rates.		Population exposure estimates descriptions are contained in state response plans.  Removed wording not applicable to a NUREG-0654 R2 licensee related element.
	[5.2.6 Special Need Populations] The State Plan contains a discussion of evacuation of special needs populations.		Non-RIE Special needs evacuation descriptions are contained in state response plans. Removed wording not applicable to a NUREG-0654 R2 licensee related element.
224.	[5.2.7 Population Distribution] The State Plan includes maps and tables showing population distribution. The State Plan also described the means for notifying transient and resident population.	[CEP – J.10.b]  Details on population distribution around the NextEra sites, by evacuation areas, are provided in the site ETE report.	Non-RIE Revised population distribution reference to appropriate document. Removed wording not applicable to a NUREG-0654 R2 licensee related element.
225.	[5.3 Radiological Exposure Control] [5.3.1 On-Site Radiation Protection Program] An objective of emergency response is to minimize radiation exposure to individuals both on site and off site. Situations may arise, however, when observance of this goal is inconsistent with personnel or plant safety. In anticipation of such needs, guidelines have been established for emergency conditions. The guidelines on which the emergency radiation protection program is based are stated below. Exposure to emergency response personnel should be maintained As Low As Reasonable Achievable (ALARA). Actions taken during an emergency should take into consideration the amount of exposure required to accomplish the task versus the potential benefit to the public health and safety. Conditions may warrant re-entry into high radiation	[CEP – K.1]  Approval is required if emergency workers are expected to receive dose in excess of 10 CFR 20 occupational dose limits. ALARA practices are utilized during emergencies as much as practical.  [CEP – K.1.a]  Onsite exposure guidelines for emergency workers, consistent with EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, U.S. Environmental Protection Agency, May 1992, Table 2-2, "Guidance on Dose Limits for Workers Performing Emergency Services," have been established as follows:  TEDE Limit (Rem) Activity  5 All activities during the emergency.  10 Protecting valuable property when lower dose is not practicable.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks of the CEP.

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the course of their duties will be monitored by the plant [CEP – K.1.c] radiation exposure monitoring program. Because emergency exposures requiring immediate action are not planned, they are not controlled as a Planned Special Exposure. Dose received from exposure under emergency conditions will be added to the dose received during the current year, prior to the emergency, to determine compliance with the occupational dose limits in 10 CFR 20. Doses above regulatory limits will require reporting pursuant to 10 CFR 20.2202 and 20.2203. Any dose in excess of the annual limits specified in Section 20.1201(a) will be accounted for in accordance with 10 system not be readily accessible or available, CFR 20.1206(e). If an individual exceeds any of these limits, then that individual will not be available for additional dose under 20.1201(a).

Personnel dosimeters are issued to and worn by NextEra radiation worker qualified personnel who may be required to work in Radiological Controlled Areas in accordance with radiation protection procedures.

Radiation protection personnel in the OSC and TSC have the responsibility to monitor and assess the radiation doses received by ERO personnel on a 24hour per day basis throughout a declared event.

Personnel dose records are documented and managed using a computerized system. Should this personnel dose is manually recorded.

Dosimeters are available and will be provided to offsite agency responders if they are required to enter a Radiological Controlled Area or are expected to receive a dose in excess of 100 mRem for the event.

Non-RIE

[5.3.3 Contamination Control and Decontamination] 227. Procedures A personnel decontamination washroom and shower room with chemical decontamination agents is provided in the FPL Dress Out Building. Except in cases of serious injury, accepted decontamination practices will be employed on site. Life endangering injuries such as extensive burns, serious wounds, or fractures shall receive prompt attention in preference to decontamination. Personnel with injuries involving radiation or radioactive contamination will be handled by the Emergency Room at Baptist Hospital or Mercy Hospital. Plant Radiation Protection procedures specify that decontamination of uninjured personnel must be attempted at contamination levels greater than minimum detectable activity as defined in Radiation Protection procedures.

Radiation safety controls are established 24 hours per day to contain the spread of loose surface radioactive contamination. Contamination control limits are defined in radiation protection procedures. Personnel leaving the contaminated areas are monitored to ensure that they are not radioactively contaminated.

[CEP - K.1.e]

[CEP - K.1.d]

Personnel decontamination is performed using normal radiation protection procedures in on-site facilities. Personnel decontamination facility locations are described in the site annexes.

Contamination on personnel will be removed in accordance with established radiation protection procedures.

Equipment will be released for use outside of the contaminated areas only when radioactive contamination is within acceptable limits. All equipment must be checked for contamination before being taken from a known contaminated area. Equipment and material decontamination is performed

The CEP and Annexes are formatted in a 50.47(b) outline.

Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.

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		using normal radiation protection procedures.	
		[CEP – L.2.b]	
		Arrangements have been made with local hospitals for the medical treatment of contaminated injured or over exposed personnel. These facilities and their services are available 24 hours per day.	
		[Annex – L.2.b]	
		Sheridan Emergency Physician Services of South     Dade	
		Sheridan Emergency Physician Services of South Dade, located at Baptist Hospital of Miami, provides for the immediate availability of fully equipped medical facilities with a staff of physicians and nurses skilled in the treatment of personal injury accompanied by radioactive contamination. This facility is available on a 24-hour basis.	
		The patient receiving area is equipped for patient decontamination and the performance of emergency medical procedures for life saving purposes. Additional emergency medical facilities in the hospital include the emergency room and an intensive care unit available for the treatment of decontaminated radiation accident casualties or persons who have received only internal radiation exposures.	
		Sheridan Emergency Physician Services of South Dade, will provide for hospital treatment, medical examinations, and laboratory services for those employees and other persons designated by Florida Power & Light who have been involved in a radiation incident.	
		Mercy Hospital     Mercy Hospital of Miami, also provides for the immediate availability of medical facilities and trained hospital staff in the treatment of personal injury accompanied by radioactive contamination. Medical services are available on a 24-hour basis. The patient receiving area is equipped for patient	

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		decontamination and the performance of emergency medical procedures for life saving purposes. Additional emergency medical facilities in the hospital include the emergency room and an intensive care unit available for the treatment of decontaminated radiation accident casualties or persons who have received only internal radiation exposures.  Mercy Hospital will provide for hospital treatment, medical examinations, and laboratory services for those employees and other persons designated by	
		Florida Power & Light who have been involved in a radiation incident.	
	[5.3.3 Contamination Control and Decontamination] Food for emergency workers would be brought in from off site, if necessary. Frequent surveys of habitable areas utilized during emergency response (i.e., Control Room, OSC, TSC, and Guardhouses) will be performed to assure that these areas remain uncontaminated and tenable. Specifically, special attention to drinking water and food supplies will be given to assure that these supplies remain uncontaminated.		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed wording regarding food and drinking water not applicable to a NUREG-0654 R2 licensee related element. Habitability and area monitoring provided in other elements.
229.	Delle estimate de la companya della companya de la companya della	CEP – K.1.e] Personnel decontamination is performed using normal	Non-RIE The CEP and Annexes are
	during an emergency will be handled by normal plant procedures. Any special circumstances will be	, , , , , , , , , , , , , , , , , , , ,	formatted in a 50.47(b) outline. Provided content consistent with
	-	Contamination on personnel will be removed in accordance with established radiation protection procedures.	NUREG-0654 R2 element detail.
		Equipment will be released for use outside of the contaminated areas only when radioactive contamination is within acceptable limits. All equipment must be checked for contamination before being taken from a known contaminated area. Equipment and material decontamination is performed using normal radiation protection procedures.	
230.	[5.4 Recovery and Re-entry]	[CEP – M.1.a]	Non-RIE
	[5.4.1 On-Site]	Reentry can occur during the plume or post-plume	The CEP and Annexes are

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Once the hazard potential has passed, steps must be taken to recover from the incident. All actions should be preplanned in order to limit exposures. Access to the area will be controlled and personnel exposures will be documented.

The Recovery Manager (RM)/EC has the responsibility for determining when it is appropriate to enter into the recovery phase. The Recovery Organization consists of an augmented Expanded Emergency Response Organization. The Emergency Response Managers would continue their assigned duties using additional personnel as necessary. The Recovery Manager (or EC) will evaluate the status of the plant by reviewing all current and pertinent data available from emergency response and/or monitoring teams. The recovery phase will begin only when the plant conditions are stable and the following guidelines would function as a matrix management organization are met:

- 1) Radiation levels in all in-plant areas are stable or decreasing with time.
- Releases of radioactive materials to the environment from the plant are under control or have ceased.
- 3) Any fire, flooding, or similar emergency conditions are controlled or have ceased.
- The reactor is in a stable condition.

At the time of initiating activities to enter the recovery phase, the Recovery Manager will be responsible for informing all applicable agencies (e.g., Federal, State, and Local agencies) that on-site conditions have stabilized and activities for recovering from the incident can now begin. Once these agencies and the EC have been informed, the Recovery Manager has the authority to de-escalate the emergency classification.

Planned recovery actions which may result in radioactive release will be evaluated by the Recovery Manager and the EOF staff in advance. Such planning and data pertaining to the possible release will be reported to the appropriate off-site emergency response organization and agencies.

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phase and refers to the temporary movement of people into an area of actual or potential hazard. Personnel who have been evacuated or relocated from a restricted area may be allowed to reenter under controlled conditions to perform additional emergency response activities.

Reentry into the OCA will be based on site conditions. During or following a HAB incident, reentry criteria take into consideration site security and threat conditions.

[CEP - M.2]

The recovery activities would be managed much like a normal outage, except that certain activities unique to the post-accident situation may be controlled by the recovery organization. The recovery organization to coordinate activities with the normal company organization. This organization may be located at the EOF or the site, as appropriate.

The primary positions in the recovery organization are described as follows:

- Recovery Manager Overall management of recovery activities. High level coordination with offsite agencies.
- Onsite Recovery Coordinator Directs the onsite recovery activities.
- Offsite Recovery Coordinator Directs interface with offsite agencies during the recovery.
- Radiological Assessment Coordinator (if needed) Coordinates radiological and environmental assessment with offsite agencies. Coordinates offsite radwaste management and decontamination activities.
- Spokesperson Directs the public information program during the recovery phase.

[CEP - M.3]

Steps will be taken to terminate from the event, either directly or following a transition period (prior to

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formatted in a 50.47(b) outline. Provided content consistent with NUREG-0654 R2 element detail. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks of the CEP.

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231.	evacuated area will be made by the Émergency Response Organization personnel when required for one or more of the following reasons:  1) To ascertain that all personnel who were in the affected area have been evacuated, or to search for unaccounted personnel.  2) To assist in evacuating injured or incapacitated personnel from the affected area.  3) To perform operations which may mitigate the effect of the emergency or hazardous condition.  4) To determine the nature and extent of the emergency and/or radiological conditions.  5) to establish personnel exclusion area boundaries. Re-entry will take place only under the authority of the Emergency Coordinator/RM. The OSC Supervisor is responsible for evaluating the existing emergency conditions and informing the Emergency Coordinator via the OSC of the advisability of re-entry. For radiological emergencies, the TSC Radiation Protection Supervisor will be responsible for providing RP coverage to Emergency Response Organization personnel as required. More detailed guidance for re-entry teams is contained in plant procedures.  [5.4.2 Off-Site]	Unusual Event and Alert classification levels will be directly terminated (no entry into recovery).  Items that must be considered before terminating the emergency condition to either a normal or a recovery organization are as follows:  Emergency Action Level criteria  Releases of radioactive materials to the environment  In-plant radiation levels  Plant stable and long term core cooling available  Containment integrity  Functionality and integrity of plant systems, facilities, power supplies, equipment, and instrumentation  Fire, flood, earthquake or similar hazardous emergency conditions  Security issues  Site access not limited for personnel and support services  Decisions to relax protective actions for the public will	Non-RIE
	State and County officials would be in control of		Removed wording.
	recovery and re-entry off site. Population exposure estimates are discussed in the State Plan. The State		ORO reentry and recovery
	Plan discusses the projected dose calculations and		descriptions are contained in their
	assessment and monitoring in the Ingestion Exposure		respective E-Plans.
	Pathway EPZ. The State Plan (Recovery and Re-		
	entry) also discusses population dose measurement.		

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232.	[Figure 5-1, Protective Action Recommendations	Annex – J.6]	Editorial
	Based on Plant Conditions and Offsite Dose	The PTN site specific PAR basis is documented in EP-	CEP PTN Annex references the
	Estimates]	PTN-134, Protective Action Recommendation	applicable bases document.
	Note – No figure in E-Plan. Simply refers to Form F444 and Form F439	Technical Basis Manual.	
233.	[Figure 5-2, Site Evacuation Routes]	[Figure J.2-1: PTN Site Evacuation Routes]	No Change
234.	[Figure 5-3, Miami-Dade and Monroe County	[Figure 0.2 1.1 114 One Evacuation Reacted]	Non-RIE
	Evacuation Routes]		EPZ evacuation routes documented in EP-PTN-133, Evacuation Time Estimate Study
235.	[Table 5-1, Summary of Available Meteorological		Non-RIE
	Data]		Table removed. Sources of meteorological data documented in elements H.7.1 and H.8.1.
236.	[Table 5-2, Sources of Meteorological Data]		Non-RIE
			Table removed. Sources of
			meteorological data documented in
			elements H.7.1 and H.8.1.
237.	[Table 5-3, Typical Population within the Owner		Non-RIE
	Controlled Area]		EPZ population distribution
			documented in EP-PTN-133, Evacuation Time Estimate Study
238.	[6.1 Preparatory Public Information Program]	ICEP – GI	Non-RIE
230.	[6.1.1 Purpose]	Emergency planning information is made available to	The CEP and Annexes are
	The purpose of the preparatory public information		formatted in a 50.47(b) outline.
	program is to inform the public of how they will be	on how they will be notified and what actions they may	Section purpose descriptions
	notified and what their actions should be in a	be asked to take (e.g., listening to a local broadcast	replaced with planning standard
	radiological emergency.	station, remaining indoors, etc.). Information will also	wording.
		be provided to the news media to include principal	
		points of contact to receive information (including the	
		physical location(s)) and information about the coordinated dissemination of information from all	
		agencies engaged in the response.	
239.	[6.1.2 Program Execution]	[CEP – G.1]	Non-RIE
	Florida Power & Light Company has the responsibility	NextEra, in coordination with OROs, updates and	The CEP and Annexes are
	for conducting the public information program with the	distributes site related emergency planning	formatted in a 50.47(b) outline.
	support from the State Division of Emergency	information annually to residents living within the	Wording altered to address the level
	Management and the Monroe County and Miami-Dade	plume-exposure pathway emergency planning zone	of detail of the NUREG-0654 R2
	County Emergency Management offices. The State Plan discusses the preparatory public	(EPZ). Information disseminated to the public is in the	element and fleet description.
	The State Flan discusses the preparatory public	form of printed or electronic materials. Public	

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	information program. Education will be provided on an annual basis to local residents, transients, and news media in a manner consistent with the guidance in NUREG 0654, 10 CFR 50.47, and in the manner described in the State Plan.	information for the transient population is also provided.  Annual distribution of safety information which contains educational information on emergency preparedness, sheltering, ANS, radiation, and telephone numbers of agencies to contact for more information.  Information for residents with special needs and non-English translations is incorporated per current federal guidance.	
240.	[6.2 Florida Power & Light Company Emergency Public Information Program] This section delineates the organization, public information network, and facilities that would be made available as required in an emergency.	[CEP – G] Emergency planning information is made available to the public on a periodic basis and includes information	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Section purpose descriptions replaced with planning standard wording.
241.	[6.2.1 Organization] The members of the emergency public information organization (see Figures 6-1) and their respective responsibilities are as follows:  Emergency Information Manager (EIM) The EIM will be a designated company manager experienced in media relations and having knowledge of nuclear plant operations. The EIM will be responsible for coordinating dissemination of information to the public via the news media. Insofar as practical, the EIM will work with the NRC, State, and Local news media representatives to effect joint releases and public appearances. The EIM will work with other company officials to develop formal statements and responses. All FPL press releases should originate with or be cleared by the EIM. The EIM will assure that exchange of information among designated spokespersons is accomplished in a timely manner, when possible.	NextEra Corporate Communications and business unit personnel maintain programs and processes for the coordination and dissemination of information to the public and media using JIS concepts. Specifically, the process provides a structure and system for developing and delivering coordinated interagency messages; developing, recommending, and executing public information plans and strategies; advising decision makers concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort. Physical locations for interacting with the media are maintained at the corporate headquarters and locally near each site. Specific site locations are described in	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. ERO description provided in Section B.1.a and Table B-1. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks.

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	Nuclear Information Staff A staff of public information and technical personnel will be assigned as needed to the Joint Information Center. Their responsibilities will be to:  1) Provide technical briefings to the press.  2) Inform company employees through a newsletter, bulletin board statements, or other in-place networks.  3) Inform the industry, so other companies both in the United States and overseas can deal with questions as they arise from their local media.  4) Prepare background material for features, historical context, profiles, etc.  5) Handle the photographic needs of the company.  6) Record and transcribe all press conferences and other official proceedings for the benefit of company management, official agencies, and the news media.  7) Accredit and escort members of the press.  8) Provide its own stenographic and typing services for news releases, photo captions, reports, transcripts, etc.  9) Provide reference services for maintaining files of releases and photos, obtaining newspapers, monitoring wire services and news broadcasts, logging all clippings.  The staff of the Florida Power & Light Company Communications Department may be augmented by personnel from other utilities, consultants, or	A spokesperson is designated as the primary point of contact for NextEra and is responsible for the consistency of the information released by the utility. The spokesperson may select individuals to address the public on behalf of NextEra as their respective expertise is needed. This position is not designated as an ERO position.	Change Type
	universities. [6.2.2 Joint Information Center]	[CEP – G.2]	Non-RIE
	An Joint Information Center (JIC) will be provided to allow the news media access to information from the EOF. The JIC is located on the second floor of the General Office. The Emergency Information Manager will report to the EOF, a designated qualified staff will man the JIC when the EIM deems it appropriate. If deemed necessary, the EIM may designate a suitable location near the site for dealing with the media. The location of the Near Site Information Center will be based on the individual circumstances	NextEra Corporate Communications and business unit personnel maintain programs and processes for the coordination and dissemination of information to the	

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	of the event.	and inaccurate information that could undermine public confidence in the emergency response effort.	
	F r r	Physical locations for interacting with the media are maintained at the corporate headquarters and locally near each site. Specific site locations are described in the site annexes Element H.5.	
		[Annex – H.5]	
		The Joint Information Center (JIC) and the EOF are located in the same building (see Element H.3).	
		[Annex – H.3]	
		The Emergency Operations Facility (EOF) is located at the FPL General Office Building (9250 W. Flagler in Miami), approximately 25 miles north of the site.	
243.	[6.2.3 News Media Provisions]	[CEP – G.5]	Non-RIE
	Florida Power & Light Company, in cooperation with the State of Florida and the risk counties, will conduct an annual program to acquaint the news media with the emergency plans, information concerning nuclear power, and points of contact for release of public information in an emergency.  In the event of an emergency, representatives of the news media will be provided space in the Joint Information Center for work and interview purposes.	The news media will be provided materials to acquaint them with emergency planning effort at the NextEra specific site(s) annually.  Typical content includes site information, information concerning radiation, emergency planning, and points of contact for release of information to the media during an emergency.  [CEP – H.5]  A near-site JIC (outside the 10 mile EPZ) is established for each site. ERO staffing of the JIC is concurrent with other ERFs, although facility activation is coordinated with the joint offsite agencies and has no time requirement.  When activated the JIC functions as a physical location for interacting with the media and for coordination between NextEra, federal and ORO PIOs regarding communications information to the public	The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.
		and the media.	
244.	[6.2.4 Written Messages for the Public] Sample formats that may be used for release of information by FPL to the public via the news media appears in Tables 6-1 through 6-7. These releases include initial statements for each class of emergency and follow-up statements for the Alert class and	[CEP – G.2]  NextEra Corporate Communications and business unit personnel maintain programs and processes for the coordination and dissemination of information to the public and media using JIS concepts. Specifically, the process provides a structure and system for	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.

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	higher.	developing and delivering coordinated interagency messages; developing, recommending, and executing public information plans and strategies; advising decision makers concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.	
		Physical locations for interacting with the media are maintained at the corporate headquarters and locally near each site. Specific site locations are described in the site annexes Element H.5.	
245.	[6.3 Rumor Control] FPL will coordinate information exchange with State and County officials. This coordination will include awareness of media releases. This timely exchange of information among designated spokespersons will aid in dispelling most rumors. In written material which is disseminated annually, means for the public to obtain timely and accurate information is provided. The State Plan also discusses Rumor Control. Additionally, Miami-Dade County Office of Emergency Management maintains telephones designated for rumor control.	[CEP – G.1]  NextEra, in coordination with OROs, updates and distributes site related emergency planning information annually to residents living within the plume-exposure pathway emergency planning zone (EPZ). Information disseminated to the public is in the form of printed or electronic materials. Public information for the transient population is also provided.  Annual distribution of safety information which contains educational information on emergency preparedness, sheltering, ANS, radiation, and telephone numbers of agencies to contact for more information.  Information for residents with special needs and non-English translations is incorporated per current federal guidance.  [CEP – G.4]  NextEra personnel coordinate with ORO and federal PIOs via the JIS, or in a JIC when activated, to identify and address public inquiries and inaccurate information.  Public information personnel monitor media and public sources for misleading or erroneous information and	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.
		to address inquiries. Rumors and misinformation are collected and provided to the appropriate individual or agency PIO. The PIOs assess and discuss the rumors and misinformation to coordinate responses.	

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		ORO and federal PIOs address misinformation relating to offsite conditions, including protective action directives. NextEra spokespersons address misinformation regarding station/utility rumors. Rumors and incorrect information are addressed in media statements and at news conferences as appropriate.	
246.	[Figure 6-1, Public Information Interfaces]		Non-RIE
			The CEP and Annexes are formatted in a 50.47(b) outline.
			Removed figure. Public information ERO position descriptions provided in Section B.1.a. NUREG-0654 R2 does not require an Public Information Interfaces figure.
247.	[Table 6-2, Initial FPL Statement (Sample)]		Non-RIE
			The CEP and Annexes are formatted in a 50.47(b) outline.
			Sample statements removed from plan. NUREG-0654 R2 does not require sample statements.
248.	[Table 6-3, Initial FPL Statement (Sample)]		Non-RIE
			The CEP and Annexes are formatted in a 50.47(b) outline.
			Sample statements removed from plan. NUREG-0654 R2 does not require sample statements.
249.	[Table 6-4, Initial FPL Statement (Sample)]		Non-RIE
			The CEP and Annexes are formatted in a 50.47(b) outline.
			Sample statements removed from plan. NUREG-0654 R2 does not require sample statements.
250.	[Table 6-5, Follow-up FPL Statement (Sample)]		Non-RIE
			The CEP and Annexes are formatted in a 50.47(b) outline.
			Sample statements removed from plan. NUREG-0654 R2 does not

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			require sample statements.
251.	[Table 6-6, Follow-up FPL Statement (Sample)]		Non-RIE
			The CEP and Annexes are
			formatted in a 50.47(b) outline.
			Sample statements removed from
			plan. NUREG-0654 R2 does not
			require sample statements.
252.	[Table 6-7, Follow-up FPL Statement (Sample)]		Non-RIE
			The CEP and Annexes are
			formatted in a 50.47(b) outline.
			Sample statements removed from
			plan. NUREG-0654 R2 does not
			require sample statements.
253.	7.1 Exercises and Drills	[CEP - N]	Non-RIE
	7.1.1 Definitions	Periodic exercises are (will be) conducted to evaluate	The CEP and Annexes are
	An exercise is an event that tests the integrated	major portions of emergency response capabilities,	formatted in a 50.47(b) outline.
	capability of a major portion of the basic elements existing within the FPL Emergency Response	periodic drills are (will be) conducted to develop and	Section purpose descriptions
	Organization. An exercise normally includes	maintain key skills, and deficiencies identified as a	replaced with planning standard
	mobilization of State and Local governmental	result of exercises or drills are (will be) corrected.	wording.
	personnel and resources adequate to verify the		
	capability to respond to an accident scenario.		
	A drill is a supervised instruction period aimed at		
	testing, developing, and maintaining skills in a		
	particular operation. A drill is often a component of an		
	exercise. A drill should be evaluated by the		
054	supervisory personnel conducting the drill.	IOED N.41	Non DIE
254.	[7.1.2 Purpose] Periodic exercises and drills will be conducted in order	[CEP – N.1]	Non-RIE
	to test the state of emergency preparedness of	1. Exercise. All exercise is all event that tests the	The CEP and Annexes are
	participating personnel, organizations, and agencies.	integrated capability and a major portion of the elements of the emergency plans and	formatted in a 50.47(b) outline.
	Each exercise or drill will be conducted to:	organizations.	Wording altered to address the level
	Ensure that participants are familiar with their	Over the period of the exercise cycle, exercises	of detail of the NUREG-0654 R2 element and fleet description.
	respective duties and responsibilities.	will test the adequacy of timing and content of	element and neet description.
	2) Verify the adequacy of the Emergency Plan and	implementing procedures and methods, test	
	emergency procedures.	emergency equipment and communications	
	3) Test the communications network and systems.	networks, test the public alert and notification	
	4) Check the availability of emergency supplies and equipment.	system, and ensure that emergency	
	<ul><li>5) Verify the operability of emergency equipment.</li></ul>	organization personnel are familiar with their	
L	of voing the operability of efficigency equipment.		

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	The results of the exercises will form the basis for	duties.	
	prescribing action to eliminate identified deficiencies.	<ul> <li>Exercises must provide the opportunity for the ERO to demonstrate proficiency in the key skills necessary to implement the principal functional areas (see N.4) of emergency response.</li> </ul>	
		<ul> <li>State and local agencies within the plume exposure pathway EPZ are provided the opportunity to participate by invitation as described in Element N.2.a.</li> </ul>	
		Drill: A drill is aimed at testing, developing and maintaining skills in one or more emergency plan functions.	
		Drill types may be operational or discussion- based events (e.g., single ERF or tabletop drills). Drills may be a component of an exercise.	
		<ul> <li>During drills; activation of all of the ERFs is not required, supervised instruction is permitted, participants may be given the opportunity to resolve problems (success paths), and focus may be primarily on onsite training objectives.</li> <li>Drills may include evaluation of specific performance objectives or be conducted for non- evaluated training only.</li> </ul>	
		The ERO (not necessarily each ERO member) shall be provided the opportunity to develop and maintain key emergency response skills within the scope of their duties in drills and exercises during each exercise cycle.	
		Over the course of an eight-year cycle all unique initiating conditions in the EAL scheme (with the exception of judgment ICs) are made available for the demonstration of event classification within drills or exercises.	
255.	[7.1.3 Planning]	[CEP - N.1.a]	Non-RIE
	The Site Functional Area Manager (SFAM) - Emergency Preparedness Manager, will be responsible for the planning, scheduling, and	Critiques of each drill and exercise will be held following each event to evaluate areas and identify issues. The critique is performed following the	The CEP and Annexes are formatted in a 50.47(b) outline.  Wording altered to address the level
	coordinating of all emergency drills or exercises involving off-site agencies. A sample format for drill	conclusion of a drill or exercise using preselected drill and exercise performance objectives.	of detail of the NUREG-0654 R2 element and fleet description.

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	and exercise scenarios appears as Table 7-1. All	Provisions are made for federal and ORO	Specific drill scope and periodicity
	exercises and drills involving the plant are subject to	representatives to observe and participate in drill and	requirements contained in elements
	the approval of Plant Management.	exercise critiques when present.	N.1 through N.4.
	When an exercise is to be conducted, the SFAM,	A written report is prepared following a critique to	Scenario development instructions
	Emergency Preparedness, in coordination with plant	document whether the objectives were successfully	removed (procedure level content).
	management, will:	demonstrated.	(р. сестане не се не
	1) Schedule a date for the exercise in coordination		
	with the Primary State and County Emergency		
	Response agencies.		
	2) Obtain the approval of the Site Vice President.		
	3) Coordinate all FPL efforts with other participating		
	personnel, organizations, and agencies.		
	4) Offer Federal, State, and Local officials the		
	opportunity to observe the exercise.  5) Assign personnel to prepare a scenario.		
	<ul><li>6) Assign personner to prepare a scenario.</li><li>6) Assign controllers, evaluators, and observers.</li></ul>		
	7) Discuss and evaluate the exercise with observers		
	and principal participants.		
	8) Review evaluations of the exercise or drill with the		
	Senior Leadership Team through distribution of		
	critique report.		
	9) Ensure that deficiencies which are identified are		
	addressed with corrective measures.		
	10) Prepare and submit documentation in accordance		
	with plant procedures.		
	The SFAM, Emergency Preparedness, may delegate		
	any of these responsibilities to the Emergency		
	Preparedness Coordinator as deemed necessary. The		
	SFAM, Emergency Preparedness, shall retain		
	oversight and accountability.		
	These exercises and drills will simulate emergency		
	conditions and may be scheduled such that two or		
	more exercises or drills are conducted simultaneously.		
	The SFAM, Emergency Preparedness, will normally		
	notify the off-site emergency response organizations		
	and agencies at least 30 days in advance of the		
	scheduled date of an exercise.		
256.	[7.1.4 Conduct of Exercises, Drills, and Tests]	[CEP - N.2.a]	Non-RIE
	[7.1.4.1 Exercises (Integrated Drills)]	Each NextEra site will conduct a plume exposure	The CEP and Annexes are
	A major radiological emergency response exercise will	pathway exercise biennially. Specifically, the plume	formatted in a 50.47(b) outline.
	be conducted at least once every two calendar years	exposure pathway exercise is developed to provide	

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## **Current Emergency Plan**

to demonstrate the effectiveness of the Emergency Plan. Any exercise that will provide for the coordination with and participation of off-site emergency response personnel, organizations, and agencies including those of Federal, State, and Local governments should escalate to adequately test the response capabilities of the organizations involved. The emergency scenario will be varied from year to year such that all major elements of the plan are tested at least every eight years. Drills and exercises will be conducted in a manner to provide realistic and challenging scenarios to the Emergency Response Organization.

During the interval between biennial exercises, adequate emergency response capabilities will be maintained by conducting drills, including at least one exercise involving a combination of some of the principal functional areas of emergency response capabilities. The principal functional areas of emergency response include activities such as management and coordination of emergency response, accident assessment, protective action decision-making, and plant system repair and corrective actions.

During this off-year exercise, activation of all of the emergency response facilities (TSC, OSC, EOF) would not be necessary, there would be an opportunity to consider accident management strategies, supervised instruction would be permitted, operating staff would have the opportunity to resolve problems (success paths) rather than have controllers intervene, and the drills could focus on on-site training objectives.

Upon completion of the hostile action based exercise in 2015, FPL will implement an exercise cycle of eight years where key functions will be demonstrated by members of the ERO. During that cycle, the following exercises will be evaluated by the NRC and FEMA.

- 1) Hostile Action
- 2) Ingestion pathway
- No or minimal release

## **Common Emergency Plan and Site Annex**

the ERO with the opportunity to demonstrate proficiency in the principal functional areas of emergency response:

- Management and coordination of emergency response
- Accident assessment
- Event classification
- Notification of the OROs
- Assessment of the onsite and offsite impact of radiological release
- PAR development (required only in exercises that include a GE)
- Protective action decision-making (onsite protective actions)
- Plant system repair and mitigative action implementation

OROs will be invited to participate in plume exposure pathway exercises. If an ORO chooses not to participate, their participation is not required and it should be documented that they were given the opportunity to participate.

Biennial plume exposure pathway exercise scenarios are submitted to the NRC under 10 CFR 50.4 at least 60 days before they are held.

[CEP - N.1.c]

Each NextEra site will conduct at least one off-hours drill or exercise within an eight-year exercise cycle.

An off-hours drill or exercise is established as any time of day on a weekday holiday, or any time of day on a weekend day, or between the hours of 6:00 p.m. and 4:00 a.m. on a normal workday.

The off-hours drill requirement may be satisfied by an actual event provided it meets the above off-hours criteria and the objectives are evaluated and documented in a critique report for the augmentation of the ERO, the transfer of responsibilities, and facility activation.

#### **Change Type**

Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.

Specific drill scope and periodicity requirements contained in elements N.1 through N.4.

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#### **Current Emergency Plan Common Emergency Plan and Site Annex** Change Type 4) Fast developing (straight to SAE or GE) [CEP - N.2.b] These requirements may be combined where NextEra will assist in development and participate as appropriate. requested in an ingestion exposure pathway exercise The major elements that should be tested every 6 to support FEMA evaluation of ORO emergency plan years include, but are not limited to: response activities in this area. Off hours staffing (6 P.M. - 4 A.M.), weekends, The scope, objectives and schedule will be holidavs coordinated with appropriate federal emergency **Activation of Joint Information Center** organizations and OROs for exercises in which they Use of fire control teams participate. Use of medical support personnel Use of security personnel for prompt access to [CEP - N.3.a] emergency equipment or support Each NextEra site will conduct at least one HAB Use of one or more portions of backup scenario in an exercise within an eight-year cycle. communications for notification The HAB scenario will include either a radiological Field monitoring release scenario or no/minimal radiological release Capability for determining the magnitude and scenario, but HAB scenarios combined with a impact of the particular components of a release no/minimal radiological release scenario will not be Capability for post-accident coolant and sampling used in consecutive HAB exercises. analysis [CEP - N.3.b] Assembly and accountability Recovery and reentry Each NextEra site will conduct at least one rapid escalation scenario in an exercise within an eight-year cycle. The rapid escalation scenario will begin with an initial declaration of, or rapid escalation to, the Site Area Emergency classification level while event response is performed from the Control Room. [CEP - N.3.c] Each NextEra site will conduct at least one no/minimal radiological release scenario that does not require PARs in an exercise within an eight-year cycle. **257.** [7.1.4.2 Radiological Monitoring Drill] [CEP - N.4.d] Non-RIE A radiological monitoring drill will be conducted at Each NextEra site will conduct an environmental The CEP and Annexes are least once every calendar year. These drills will monitoring drill once per calendar year. formatted in a 50.47(b) outline. include collection and analysis of air sample media The scope of the environmental monitoring drill will Wording altered to address the level and analysis of direct radiation surveys. As an integra include performance objectives for direct radiation of detail of the NUREG-0654 R2 part of this annual drill, communications and the measurements in the environment, collection and element and fleet description. understanding of messages between the off-site analysis of sample media (e.g., water, vegetation, soil Wording removed describing RP monitoring team(s) and the EOF Field Monitoring and air), communications, and record keeping. drills requirements that are Coordinator in the EOF will be tested. The Radiation

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Protection Department will conduct Radiation Protection drills semiannually and one of the semiannual drills may be incorporated into the radiological monitoring drill.		governed under separate program requirements.
	As indicated in the State Plan, off-site radiological monitoring drills will be conducted annually, and these drills will involve the collection of sample media (e.g., water, grass, soil, and air).		
258.	[7.1.4.3 Medical Emergency Drill]	[CEP - N.4.a]	Non-RIE
	A medical emergency drill involving a simulated contaminated individual, with provisions for		The CEP and Annexes are formatted in a 50.47(b) outline.
	participation by local support services (i.e., ambulance and off-site medical treatment facility), will be conducted at least once every calendar year.	and medical/ first aid treatment, including	Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.
	Participation by local support services (i.e., ambulance and off-site medical treatment facility), may be tested	contamination control.	Potential RIE 6-1
	separately or as part of the annual medical drill.	periodicity for support Hospital and Ambulance services are performed in accordance with the 42 CFR	Refer to assessment Section 2.1 for the disposition of this item.
		482.15 regulations and are not included in the scope of the station medical drills.	
259.	[7.1.4.4 Fire Emergency Drill] Fire drills are conducted in accordance with 10 CFR 50, Appendix R, to test the operational readiness (personnel, equipment, and procedures) to control and extinguish a fire at the site. The drills also serve to evaluate and document the response of on-site personnel and participating off-site agencies to varying fire situations. The communication links and		Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Removed wording regarding fire drills. Content not applicable to a NUREG-0654 R2 licensee related element.
	notification procedures are tested at least semiannually during fire emergency drills. A post-drill critique is held after each fire drill is completed to identify possible areas for improvement in equipment and/or procedures.		Fire drills are governed under a separate regulatory program.
260.	[7.1.4.5 Communications Tests and Drills]	[CEP - N.4.f]	Non-RIE
	Communications with State and Local governments within the Plume Exposure Pathway Emergency		The CEP and Annexes are formatted in a 50.47(b) outline.
	Planning Zone (EPZ) will be tested monthly. Communications with the NRC via the Emergency Notification System (ENS) will be tested monthly. On an annual basis, communications to the State EOC	be performed as drills provided they include the	Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.

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Communication

# **Current Emergency Plan**

and Miami-Dade and Monroe County EOCs will be tested. As part of the annual test certain information will be exchanged. It will be determined whether or no the content of the drill messages are understood. The annual drill may be performed as part of the annual exercise.

As indicated in the State Plan, the State conducts communication drills at least annually. These drills include "communications between the nuclear power plants, State, and Local EOCs and field assessment teams...". The State Plan also indicates the equipment tested during drills.

#### **Common Emergency Plan and Site Annex**

**Change Type** 

**ICEP - F.31** 

Communication systems testing is accomplished in accordance with Table F-1.

# **Table F-1: Communication System Testing** Requirements

**Testing Requirement** 

System	resting Requirement
ORO Notification	Monthly (a)
System	,
NRC FTS (ENS)	Monthly (b)
Network	,
ERDS	Verify Transmission
EKDS	Quarterly
ERO Notification	Per Elements N.4.h and
System	N.4.i
Field Monitoring	Annually <sup>(a)</sup>
Teams	
Communication	
Telephone System	Frequent Use (c)
Station Radio System	Frequent Use (c)
Station PA System	Frequent Use (c)
ANS	per site specific ANS
	Design Report

- (a) Test credit may be given by successful use in a drill.
- (b) NRC ENS in the Control Room is Frequent Use. TSC and EOF require monthly testing.
- (c) Communication systems that are listed with a testing frequency of "Frequent Use" indicate that the associated equipment is normally used at a sufficient high regularity, such that separate additional testing is not needed.

# Current to Proposed Emergency Plan Comparison Analysis

# 261. 7.1.4.6 Unannounced Drills]

At least one communications drill per year will be unannounced. This unannounced drill will include notification to primary off-site response agencies (i.e., DEM, Florida Health Bureau of Radiation Control, County Emergency Management agencies) and those FPL emergency response personnel required to be notified based upon the drill scenario. The unannounced communication drill may coincide with an exercise or an actual Emergency Plan Activation. Since the exercise scenarios are held confidential; fire, medical, evacuation, communication, and accountability drills, conducted in conjunction with an annual exercise are unannounced (actual time and specific details of the simulated events are not released).

#### [CEP - F.3]

Communication systems testing is accomplished in accordance with Table F-1.

Table F-1: Communication System Testing Requirements

Communication System	Testing Requirement	
ORO Notification System	Monthly <sup>(a)</sup>	
NRC FTS (ENS) Network	Monthly (b)	
ERDS	Verify Transmission	
ENDS	Quarterly	
ERO Notification System	Per Elements N.4.h and	
ERO Notification System	N.4.i	
Field Monitoring Teams	Annually <sup>(a)</sup>	
Communication		
Telephone System	Frequent Use <sup>(c)</sup>	
Station Radio System	Frequent Use <sup>(c)</sup>	
Station PA System	Frequent Use <sup>(c)</sup>	
ANS	per site specific ANS	
ANG	Design Report	

- (a) Test credit may be given by successful use in a drill.
- (b) NRC ENS in the Control Room is Frequent Use. TSC and EOF require monthly testing.
- (c) Communication systems that are listed with a testing frequency of "Frequent Use" indicate that the associated equipment is normally used at a sufficient high regularity, such that separate additional testing is not needed.

[CEP - N.4.i]

The NextEra ERO notification is an all-call process. Each NextEra site will conduct an off-hours unannounced ERO call-in drill biennially to verify each minimum staffing ERO position meets the required Table B-1 response time.

The scope of the off-hours unannounced ERO call-in drill will require collection of the ERO notification system report which documents response within the required time.

Completion of an Element N.4.h off-hours unannounced ERO report-in drill satisfies the

#### Potential RIE 6-2

Refer to assessment Section 2.2 for the disposition of this item.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		requirements of the off-hours unannounced ERO call-in drill in this element.	
		The Off-Hours Call-In Drill requirement may be satisfied by an actual event provided the objectives are evaluated and documented in a critique report.	
262.	[7.1.4.7 Augmentation Drills]	[CEP – N.4.h]	Non-RIE
	capability of the process to augment the on-shift staff in a short period after declaration of an emergency. These drills are conducted using the following	Each NextEra site will conduct an off-hours unannounced ERO report-in drill at least once within an eight-year cycle.  The scope of the off-hours unannounced ERO report-	The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.
	<ul> <li>methods:</li> <li>The station will initiate an unannounced off-hours ERO augmentation drill where no actual travel is required. This drill can be conducted independent of, or in conjunction with, a station drill.</li> <li>At least once per drill cycle (every 8 years), an off-hours unannounced activation of the ERO Notification System with actual response to the emergency facilities is conducted.</li> <li>Off-hours is defined as between 6:00 pm and 4:00 am. Weekends and holidays are also considered off-hour periods.</li> </ul>	in drill will require actual response to the assigned facility.  The Off-Hours Report-In Drill requirement may be	
		satisfied by an actual event provided objectives are evaluated and documented in a critique report.  [CEP – N.4.i]	
		The NextEra ERO notification is an all-call process. Each NextEra site will conduct an off-hours unannounced ERO call-in drill biennially to verify each minimum staffing ERO position meets the required Table B-1 response time.	
		The scope of the off-hours unannounced ERO call-in drill will require collection of the ERO notification system report which documents response within the required time.  Completion of an Element N.4.h off-hours	
		unannounced ERO report-in drill satisfies the requirements of the off-hours unannounced ERO call-in drill in this element.	
		The Off-Hours Call-In Drill requirement may be satisfied by an actual event provided the objectives are evaluated and documented in a critique report.	
263.	[7.1.5 Evaluation]	[CEP - N.1.a]	Non-RIE
	During drills and exercises, controllers may make on- the-spot corrections to actions taken by drill	Critiques of each drill and exercise will be held following each event to evaluate areas and identify	The CEP and Annexes are formatted in a 50.47(b) outline.
	participants that might affect the planned outcome (objective) of the drill. Minor errors in procedures or techniques will be noted and discussed during the nost drill evaluation.	issues. The critique is performed following the conclusion of a drill or exercise using preselected drill and exercise performance objectives.	Wording altered to address the leve of detail of the NUREG-0654 R2 element and fleet description.
	Following an exercise; the SFAM, Emergency	Provisions are made for federal and ORO	Critique report instructions removed

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Preparedness, or designee, the Emergency Preparedness Coordinator, Turkey Point Plant management, FPL controllers/evaluators, and principal participants in the exercise will meet to discuss and evaluate the exercise. The evaluation should be based on the ability of participants to follow emergency procedures, the adequacy of emergency procedures, and the adequacy of emergency equipment and supplies. The Emergency Preparedness Coordinator will be responsible for any necessary changes in the Plant Emergency Procedures and for recommending changes in the Emergency Plan to the SFAM, Emergency Preparedness.	representatives to observe and participate in drill and exercise critiques when present.  A written report is prepared following a critique to document whether the objectives were successfully demonstrated.	(procedure level content).
264.	<ul> <li>[7.2 Emergency Response Training]</li> <li>[7.2.1 Objectives]</li> <li>The primary objectives of emergency response training are as follows:</li> <li>1) Familiarize appropriate individuals with the Emergency Plan through related Emergency Plan Implementing Procedures (EPIPs).</li> <li>2) Instruct individuals in their specific duties to ensure effective and expeditious action during an emergency.</li> <li>3) Periodically present significant changes in the scope or content of the Emergency Plan Implementing Procedures.</li> <li>4) Provide refresher training to ensure that personnel are familiar with their duties and responsibilities.</li> <li>5) Provide the various emergency organization groups with the required training that will ensure an integrated and prompt response to an emergency situation.</li> </ul>	[CEP – O] Radiological emergency response training is provided to those who may be called on to assist in an emergency.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Section purpose descriptions replaced with planning standard wording.
265.	[7.2.2 Training of Emergency Response Organization (ERO) Personnel] Training programs have been established for personnel assigned to the Emergency Response Organization (ERO). The programs include initial indoctrination (General Employee Training) and subsequent retraining. The training program for members of the ERO will	<ul> <li>[CEP – O.1]</li> <li>Initial and continuing ERO training is conducted to ensure ERO personnel are properly qualified to their specific position. Categories of personnel requiring training include:</li> <li>1. Emergency Directors (includes the aspect of classification, notification and PARs)</li> <li>2. Accident Assessment</li> </ul>	Non-RIE  The CEP and Annexes are formatted in a 50.47(b) outline.  Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.  Previous annual retraining

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# **Current Emergency Plan**

include practical drills in which each participating individual demonstrates an ability to perform assigned emergency functions. Participation in a drill or exercise is not required for initial qualification in the ERO. The Training Manager is responsible for conducting and documenting the initial training and annual retraining programs for FPL emergency organization personnel. The Emergency Preparedness Coordinator is responsible for the content and accuracy of the Emergency Preparedness training.

Each new employee permanently assigned as an Emergency Response Organization member at the Turkey Point Plant shall be given initial training in the Emergency Plan and EPIPs.

# **Common Emergency Plan and Site Annex**

- 3. Radiation Protection and Monitoring
  - a. ERO RPT position is qualified to ANSI technician standards.
  - b. ERO RP Qualified Individual position is task qualified to perform the following:
    - Provide RP coverage for accessing known radiological environments (which includes respirator qualifications)
    - · Control dosimetry and RCA access
    - Provide in-plant surveys
  - c. ERO Field Monitoring Team Technicians receive initial training for the tasks they will be expected to perform during an emergency. The following general topics will be included in the training:
    - · Equipment and equipment checks
    - Communications
    - Plume tracking techniques
    - · Personnel monitoring
    - Emergency exposure criteria
    - Locations and use of radiological emergency equipment
- 4. Repair and Damage Control Teams
  - a. Lead OSC Supervisor position is trained to perform RP supervisory tasks.
  - b. Operations, maintenance, chemistry and radiation protection personnel who would be assigned to repair and damage control teams are trained as part of their normal job-specific duties to respond to both normal and abnormal plant conditions and work under direction of an ERO supervisor in the OSC.
- 5. Security
  - a. Security personnel receive emergency plan training as part of their normal job specific training.
  - b. Security personnel assigned a specific ERO position receive training on emergency plan related tasks.
- 6. Fire Brigade Refer to the site fire protection program.
- 7. First Aid Personnel assigned as first aid

**Change Type** 

requirement now determined on a task basis using SAT practices.

Program responsibilities documented in Section P. Page 127 of 134

#	Current Emergency Plan		Change Type
		responders maintain qualifications equivalent to Red Cross Standard First Aid techniques.  CEP – O.2]  The ERO training program is developed and evaluated based on position-specific responsibilities/tasks using Systems Approach to Training (SAT) principles, when applicable.	
	[7.2.2 Training of Emergency Response Organization (ERO) Personnel] For employees not assigned specific responsibility under the Emergency Preparedness Program, initial orientation training shall provide at a minimum, information describing the action to be taken by an individual discovering an emergency condition, the location of assembly areas, the identification of emergency alarms, and action to be taken on hearing those alarms. Training requirements are delineated in 0-EPIP- 20201, Radiological Emergency Plan Training.		Potential RIE 6-3 Refer to assessment Section 2.3 for the disposition of this item.
267.	[7.2.3 Training of Non-FPL Off-site Emergency Response Personnel]  Off-site agencies that may be called upon to provide assistance in the event of an emergency shall be offered briefings annually. These briefings will discuss basic concepts in radiation protection, plant operations and security, emergency classification, protective action recommendations, and emergency response, as appropriate. The following groups will be offered these sessions:  A. Fire and rescue  B. Police  C. Medical support  D. Principle decision makers for State and County emergency response agencies  1. Police and Fire Fighting Support  As indicated in the State Plan, police and fire fighting personnel will receive training and retraining. The State Plan describes the details of training.  2. Local Emergency Management Officials	NextEra offers emergency response training annually to local support organizations. Training includes basic radiation protection, the notification process for their organization, and their organization's expected role.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Section purpose descriptions replaced with planning standard wording.

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#	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
	As described in the State Plan, disaster preparedness personnel will receive training and retraining.  3. Emergency Action Levels (EALs) Review On an annual basis, the Emergency Action Levels shall be reviewed with State and Local government authorities.		
	Overall authority and responsibility for radiological emergency preparedness and planning lies with the Chief Nuclear Officer. As described below, through his/her staff (at the Plant and at Juno Beach), the FPL Emergency Planning and Preparedness Program is implemented. Major responsibility in this area has been delegated to the site Emergency Preparedness Manager and has been described throughout this plan.	The Chief Nuclear Officer has the overall authority and responsibility for the NextEra Common Emergency Plan.  [CEP – P.3]  The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations.	formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.
269.	[7.3.1 Emergency Plan Implementing Procedures (EPIPs)] Written procedures will be established, implemented, and maintained covering the activities associated with Emergency Plan implementation.	1	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.
270.	[7.3.2 Review of the Emergency Plan and Emergency Plan Implementing Procedures] The Emergency Plan and Emergency Plan Implementing Procedures will be under continuing review by the site emergency planning group. A comprehensive review of the Emergency Plan will be conducted annually. The Emergency Plan Implementing Procedures are reviewed during drills, exercises, and actual emergencies and revised as necessary to correct identified deficiencies. The Emergency Plan Implementing Procedures will undergo a thorough formal review at least once every two years and be revised as necessary. Notification lists and rosters will be updated at least quarterly. If	[CEP – P.4] The formal emergency plan (as defined in the introduction section) and the emergency plan implementing procedures (as defined in Section P.7) will be reviewed on an annual basis and updated if necessary. Any changes to regulations, issues identified by drills and exercises, assessments and	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. Periodic review of the EPIPs is changed from biennially to annually. Wording removed. Revision format governed by fleet document control procedures. Wording removed. Change review

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# # Current Emergency Plan

changes affecting emergency response are identified, these changes will be made as needed. The revised Emergency Plan will be distributed with the latest revision number indicated on each page. Revision bars along the right margin will be used to indicate where changes have been made. If during these annual reviews no changes are needed, this will be documented.

Changes to the Emergency Plan will be submitted, in writing or with pages marked for revision, to the site Emergency Preparedness Manager, or designee, in Emergency Preparedness. All proposed changes to the Emergency Plan shall be reviewed by the Onsite Review Group (ORG) and, prior to implementation, approved by the Site Vice President - Turkey Point Plant, the senior executive responsible for the safe operation of the plant. Revisions to the Emergency Plan will be sent to the Corporate Functional Area Manager/Peer Team Lead (CFAM/PTL).

Changes to the EPIPs are performed in accordance with plant procedures. EPIPs are approved by the site Emergency Preparedness Manager unless changes are identified for evaluation by the Onsite Review Group (ORG) with approval recommended to the Site Vice President.

Document holders will receive revisions to the Emergency Plan as they are issued. The site Emergency Preparedness Manager is responsible for coordinating the periodic reviews of the Emergency Plan. The site Emergency Preparedness Manager will ensure that elements of the emergency organization (FPL, State, local, Federal) are informed of changes to the Emergency Plan. The site Emergency Preparedness Manager is responsible for maintaining emergency preparedness. He/she maintains a roster of the Emergency Response Organization participants and their alternates. This roster is reviewed and confirmed periodically, typically once each calendar quarter. Each participant is responsible for advising the site Emergency Preparedness Manager when his/her duties are changed such that he/she can no

# **Common Emergency Plan and Site Annex**

control/records management procedures.

[CEP - P.5]

Revised copies of the emergency plan are posted and distributed in accordance with NextEra records management system procedures.

Changes to the emergency plan are submitted to the NRC in accordance with 10 CFR 50.4.

[CEP - P.3]

The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations.

[CEP - P.10]

The NextEra emergency communications directory contains select contact numbers for ORO and support organizations identified in the emergency plan and implementing procedures. The ERO call-out system contains comprehensive ERO contact information.

NextEra ERO contact information is verified semiannually and updated as needed.

Facility and support contact information in the emergency communications directory is verified annually and updated as needed.

# **Change Type**

and approval process, other than commitment to perform evaluation under 50.54(q) fleet document control procedures.

#### Potential RIE 6-4

Refer to assessment Section 2.4 for the disposition of this item.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	longer participate. In the event of transfer or termination, the site Emergency Preparedness Manager should be notified by the employee's department head, and a replacement named and trained.  Responsibility for day-to-day emergency planning coordination lies with the site Emergency Preparedness Manager.		
	[7.3.3 Review of Changes by Emergency Response Personnel] The SFAM, Emergency Preparedness, and/or Emergency Preparedness Coordinator will ensure that on-site Emergency Response Organization personnel are informed of relevant changes in the Emergency Plan and Emergency Plan Implementing Procedures.		Non-RIE  The CEP and Annexes are formatted in a 50.47(b) outline.  Wording removed. Change review and approval process, other than commitment to perform evaluation under 50.54(q) fleet document control procedures.
272.	[7.3.4 Review of Changes by Off-Site Personnel] Periodic correspondence and/or meetings will be held to inform off-site emergency support personnel of changes in the Emergency Plans and Emergency Procedures that may impact their activities in support of Turkey Point.	[CEP – A.1.a]  3. Offsite Response Organizations  The NextEra ERO coordinates response actions with OROs. Interface between the site and the OROs is governed by their respective emergency plans, which are developed and maintained in coordination with the NextEra emergency plan. OROs are described in the site annexes.  [CEP – D.1.b]  The current EAL scheme is reviewed with the sites' respective OROs on an annual basis.  [CEP – P.4]  The formal emergency plan (as defined in the introduction section) and the emergency plan implementing procedures (as defined in Section P.7) will be reviewed on an annual basis and updated if necessary. Any changes to regulations, issues identified by drills and exercises, assessments and audits, or other updates will be evaluated and incorporated into the emergency plan if warranted. Letters of Agreement will be reviewed and verified on an annual basis, and updated if warranted.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		[CEP - P.5]	
		Revised copies of the emergency plan are posted and distributed in accordance with NextEra records management system procedures.	
273.	[7.3.5 Audits]	CEP – A.1.a]	Non-RIE
	The FPL Quality Assurance Department will perform an independent audit of the Emergency Preparedness Program. The audits will verify compliance with federal regulations to include evaluation of the adequacy of the interfaces with State and Local governments, and of drills, exercises, capabilities and procedures. This audit shall be conducted either:  1) At least every 12 months, or 2) As necessary, based on an assessment against performance indicators, and as soon as reasonably practicable after a change occurs in personnel, procedures, equipment, or facilities that potentially could adversely affect emergency preparedness, but no longer than 12 months after the change. In any case, all elements of the Emergency Preparedness Program must be reviewed once every 24 months.  The part of the review involving the evaluation for adequacy of interface with State and Local governments must be available to the appropriate State and Local governments.  Plant management, Corporate Area Functional Manager (CFAM)/Peer Team Lead (PTL), and the Chief Nuclear Officer will receive audit reports.  Corrective actions, as delineated in the Quality Assurance Manual, will be assigned.  The audit findings shall be retained for minimum of 5	Emergency preparedness program elements are reviewed by persons that have no direct responsibility for the implementation of the emergency preparedness program, in accordance with 10 CFR 50.54(t).	The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. Details of 10 CFR 50.54(t) removed to eliminate duplication.
	years.		
274.	[7.3.6 Document Distribution]		Non-RIE
	The SFAM Emergency Preparedness Manager is responsible for distribution of the Emergency Plan to personnel. The SFAM Emergency Preparedness		formatted in a 50.47(b) outline.
	Manager is also responsible for Emergency Plan distributions to off-site agencies and organizations.  Appendix A (State of Florida Radiological Emergency		Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.

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#	<b>Current Emergency Plan</b>	Common Emergency Plan and Site Annex	Change Type
	Management Plan) will be distributed to the TSC, EOF, Plant Document Control Center, and CFAM/PTL Emergency Preparedness. Revisions to the Emergency Plan and Emergency Procedures will be distributed in accordance with plant procedures. The Emergency Procedures provide sufficient information to assure a thorough understanding of the various emergency response duties and responsibilities. Appendix C contains a listing of the pertinent Emergency Procedures.		
275.	[7.3.7 Emergency Preparedness Department Personnel Training] Most training of FPL Emergency Preparedness Department Personnel is through on-the-job training related to plan preparation, periodic revisions, drills and exercises for two nuclear facilities. Other training may be available through seminars, meetings, and discussions with industry groups. FPL is a member of and participates in emergency planning programs sponsored by Institute of Nuclear Power Operations (INPO).	Initial EP program training for new EP staff members is performed and documented.  Continuing training for EP staff members is performed periodically through job related opportunities (such as courses, workshops, information exchange meetings with other licensees, conferences held by industry and government agencies, etc.) to maintain current knowledge of the overall planning effort or to enhance working knowledge of plant operations.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.
		[CEP – H.11]  NextEra emergency equipment and kits are inventoried to verify adequate supplies and materials, and to inspect condition semi-annually and following each use.  Emergency use equipment and instruments are operationally checked semi-annually during the inventory, and prior to use if needed as specified in procedures.  Sufficient reserves of instruments and equipment are maintained to replace those removed from service for calibration or repair.	Potential RIE 6-5 Refer to assessment Section 2.5 for the disposition of this item.
	[7.5 Letters of Agreement] Agreements with supporting agencies will be confirmed annually (by direct contact, telephone, or in correspondence). The Letters of Agreement (LOA) will be updated every third year. Purchase orders/contracts will be renewed as required.	[CEP – P.4] The formal emergency plan (as defined in the	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.

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#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
		identified by drills and exercises, assessments and audits, or other updates will be evaluated and incorporated into the emergency plan if warranted.  Letters of Agreement will be reviewed and verified on	
070	ITable 7.4 Evenuela Canania Famueti	an annual basis, and updated if warranted.	Non-RIE
278.	[Table 7-1, Example Scenario Format]		Example removed from CEP. Scenario format instructions provided in EPIPs.
279.	[Appendix A, State of Florida Radiological Emergency Management Plan] The Florida Radiological Emergency Management Plan for Nuclear Power Plants is maintained on file in the following locations: 1) Turkey Point Document Control Center 2) Technical Support Center 3) Emergency Operations Facility 4) Corporate Functional Area Manager 5) Emergency Preparedness Manager (at Turkey Point) Note: The current State of Florida Radiological Emergency Management Plan is always available on the State of Florida, Division of Emergency Management website at https://www.floridadisaster.org/CEMP/		Non-RIE Removed list of state E-Plan storage locations at PTN.
280.	[Appendix B, Technical Support Agreements] Bechtel Power Corporation Institute for Nuclear Power Operations U. S. Coast Guard Florida Highway Patrol Monroe County Sheriff's Department Miami-Dade County Fire Department U. S. Department of Energy (Savannah River Operations) Baptist Hospital of Miami, FL Mercy Hospital U. S. Department of Energy (Oakridge Operations, REAC/TS) Framatome (Formerly AREVA) United E&C (Formerly URS)	[Annex – A.4] Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by PTN with the following organizations:  • Baptist Hospital of Miami, FL  • Bechtel Power Corporation  • Florida Highway Patrol  • Framatome  • Institute for Nuclear Power Operations  • Mercy Hospital  • Miami-Dade Fire Rescue Department (NRC Commitment. See 2007-19851 Action ID: 8)  • Miami-Dade Police Department  • Monroe County Sheriff's Department  • PTN Security Group	No Change

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Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	United E&C	
PTN Security Group		
	[List of new EPIPs to be developed]	Non-RIE
		EPIPs to be converted following
		approval of CEP.
,		
	Miami-Dade Police Department PTN Security Group	Miami-Dade Police Department   PTN Security Group   Us Coast Guard   Us Department of Energy (Savannah River Operations)   Us Department of Energy (Oakridge Operations, REAC/TS)   Us of New EPIPs to be developed    It is of new EPIPs to be developed   Us of New EPIPs to be developed    It is of new EPIPs to be developed

# **ENCLOSURE 5**

**Seabrook Station** 

**Analysis Report #4** 

**Current to Proposed Emergency Plan Comparison Analysis** 

(163 pages follow)





Seabrook Station (SBK)

# Analysis Report #4 Current to Proposed Emergency Plan Comparison Analysis

11/29/22

#### 1 INTRODUCTION

This comparison analysis identifies the differences between the current emergency plan (as of March 1, 2022, Title page Revision 77) and the proposed NextEra Common Emergency Plan (CEP) and SBK Emergency Plan Site Annex.

Differences between the content of current emergency plan and the proposed emergency plan were evaluated to determine whether any potential reductions in effectiveness were introduced by changes made.

#### 2 REVIEW METHODOLOGY

The comparison between the current emergency plan and the proposed emergency plan was made as follows:

- 1. The first step compares the content of the current emergency plan to the proposed emergency plan to determine whether there was any change. Comparisons where the wording is the same are identified as '**No Change**'.
- 2. Where a difference does exist between the wording of the two documents, it is evaluated as Editorial, No Reduction in Effectiveness or a Potential Reduction in Effectiveness. The definitions for the differences are as follows:
  - **Editorial** Differences that include typographical, formatting, paragraph numbering, spelling, grammar, punctuation, or title; or wording changes that do not alter intent of the original content or level of commitment.
  - No Reduction in Effectiveness (Non-RIE) Differences in intent or methods of
    performing a function that sustain or improve the licensee's capability to perform
    an emergency planning function in the event of a radiological emergency.
  - **Potential Reduction in Effectiveness** (**Potential RIE**) Differences that may result in reducing the licensee's capability to perform an emergency planning function in the event of a radiological emergency.

Potential RIEs were then further evaluated to determine if an actual RIE exists. All Potential RIEs are dispositioned in Section 3, Summary.

will transfer overall management responsibility

#### 3 SUMMARY

This comparison analysis identifies the differences between the current SBK Emergency Plan (as of March 1, 2022, Title page Revision 77) and the proposed NextEra Common Emergency Plan and SBK Emergency Plan Annex.

Differences between the content of proposed NextEra Common Emergency Plan and SBK Emergency Plan Annex and the current SBK Emergency Plan were evaluated to determine whether any reductions in effectiveness were introduced by changes made.

The results of the comparison analysis between the current SBK Emergency Plan and the proposed NextEra Common Emergency Plan and SBK Emergency Plan Annex identified the following changes as potential RIEs.

# 3.1 **[Potential RIE 6-1]** Rows 58, 82, 261-263, 290, 304, 305, 307 - Removal of Primary Responders at Unusual Event

#### **Current Emergency Plan Common Emergency Plan & Site Annex** Primary Responders - The eight ERO positions that are staffed on a rotating duty basis. These positions are notified by pager, respond to any emergency, and include the Site Emergency Director, Operations Technician, Technical Services Coordinator, Health Physics Coordinator, Response Manager, EOF Coordinator, ERO Technical Liaison and Emergency News Manager. Primary Responders are also notified by the automated telephone notification service during backshifts, weekends and holidays of an Alert or higher emergency classification level. During an Unusual Event, the Primary [CEP - D.3] Responders will be notified by pager. Pager 1.Unusual Event (UE) notification will be either a text message or Notification of ERO personnel. This is an numeric code. Primary Responders are the information only notification and does not Site Emergency Director, Operations require activation of emergency facilities or Technician, Technical Services Coordinator, response organizations. Any Emergency Health Physics Coordinator, Response Response Facility (ERF) may be activated at Manager, EOF Coordinator, ERO Technical the discretion of the Emergency Director. Liaison and Emergency News Manager. [CEP - F.1.c] (Protected: Ref. NRC Inspection Report 50-NextEra sites use an automated ERO 443/98-03) notification system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location. **Unusual Event Augmented Emergency** [CEP - D.3] Response Organization 1. Unusual Event (UE) During an Unusual Event, a limited number of • Initial and follow-up event notification to the ERO members, shown in Figure 8.2, are OROs and NRC. notified to assist the on-shift staff with the Notification of ERO personnel. This is an emergency response. These individuals are information only notification and does not referred to as Primary Responders. The STED require activation of emergency facilities or

response organizations. Any Emergency

#### **Current Emergency Plan**

#### **Common Emergency Plan & Site Annex**

to the arriving Site Emergency Director. As part of this transfer, the Site Emergency Director will be fully briefed by the STED on the status of the Station, accident mitigation and corrective actions taken, offsite notifications and the status of the ERO.

Response Facility (ERF) may be activated at the discretion of the Emergency Director.

Upon assuming command, the Site Emergency Director will notify appropriate ERO members of the transfer. Independent of the arrival of the Site Emergency Director, the Unusual Event Augmented ERO will carry out its responsibilities as outlined in the appropriate position descriptions of Appendix A. These actions are directed towards termination of emergency conditions, assessment of onsite radiological conditions, technical support, coordination of Station activities with offsite authorities (State and Federal), and provision of medical and other requested assistance.

[CEP - E.1]

#### 1. ERO Notification

The Emergency Director will direct or perform notification of the ERO for all emergency classification levels. ERO personnel report to their assigned emergency response facilities as directed. In the event of a security threat, personnel may be instructed to respond to alternative facilities, or seek cover if on-site. ICEP – B.21

The Emergency Director ERO position has overall command and control of a declared emergency at a NextEra site.

The Shift Manager is the individual who is onshift at all times and assumes the role of Emergency Director upon emergency declaration. As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures.,

The Shift Manager maintains overall command and control until relieved.

[CEP - B.2.a]

The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level.

Non-delegable responsibilities include the following:

- Event declaration
- · ORO and NRC Notification
- PARs for the general public
- Emergency Exposure (Dose limits and KI) Approving departures from license conditions per 10 CFR 50.54(x) transition from the Shift Manager to the Site Emergency Director upon transfer of command and control.

[CEP - B.1.a]

2. Technical Support Center (TSC)

A. Site Emergency Director

- Organizational Interface and Coordination
- Federal Assistance
- Continuous Emergency Response Operations
- Command and Control

**Current Emergency Plan** 

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Common Emergency Plan & Site Annex

#### Facility/Group Management and Supervision Contact and Use of External Support Services • Integration of Offsite Agency Personnel in the NRC Notification and Communications Event Classification · State and Local Event Notification • ERF Communications Facility Activation Backup and Alternative Facilities Accident Detection and Assessment · OSC Team Priorities, Dispatch and Control · Site Assembly and Accountability Site Evacuation ERO Radiological Protection Offsite Protective Action Recommendations Emergency Exposure Event Termination Recovery If the condition(s) that caused the Unusual [CEP - B.2] Event completely clears prior to the Control The Emergency Director ERO position has Room notifying the Primary Responders, the overall command and control of a declared STED may determine which, if any, of the emergency at a NextEra site. Primary Responders need to report to the site. The Shift Manager is the individual who is on-If not, these individuals will complete their shift at all times and assumes the role of assigned tasks on the following business day. Emergency Director upon emergency declaration. As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures. Figure 8.2 Augmented Emergency Response N/A Organization for Unusual Event 9.2.1 Unusual Event Response [CEP - D.3] Upon the declaration of an Unusual Event, the 1.Unusual Event (UE) STED will direct the notification of Station Notification of ERO personnel. This is an personnel (via the Station public address information only notification and does not system) and the Primary Responders (via a require activation of emergency facilities or digital paging system). The Primary response organizations. Any Emergency Responders are shown in Figure 8.2, Response Facility (ERF) may be activated at "Augmented Emergency Response the discretion of the Emergency Director. Organization (ERO)-Unusual Event" and are [CEP - F.1.c] the supplementary personnel designated to NextEra sites use an automated ERO assist the on-shift staff in an Unusual Event. notification system to notify ERO members of a Offsite emergency organizations are notified declared emergency. Multiple redundancies and assistance from offsite fire, medical and are incorporated such that activation of the law enforcement organizations will be system can be performed by computer or from requested, as necessary. any phone system, and operation can take place from more than one location. [CEP - A.1.a] When the emergency response facilities are

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#### **Current Emergency Plan**

#### Common Emergency Plan & Site Annex

staffed the augmenting ERO relieves the onshift personnel of emergency response functions not directly associated with unit operations. NextEra overall responsibilities for event response are as follows:

- Recognize, classify and declare an emergency.
- Notify appropriate NextEra personnel, federal, and OROs.
- Request additional support from federal, ORO, and private organizations.
- Establish and maintain effective communications with onsite and offsite entities. Continuously assess the consequences of the accident, and periodically communicate response status and assessment information to the appropriate groups and authorities.
- Take protective actions onsite and recommend protective actions to offsite authorities.
- Monitor and control radiation exposure of personnel responding during an emergency.
- In conjunction with OROs, provide emergency information to the media and public through periodic media briefings and media statements. [CEP C.2.d]

Local support organizations may be called to assist onsite for events requiring firefighting, medical, or law enforcement. Immediate assistance with firefighting, medical, and law enforcement at the sites is initiated using preestablished site specific communications systems.

During an Unusual Event, the Site Emergency Director, Operations Technician, Health Physics Coordinator, Technical Services Coordinator and ERO Technical Liaison respond to the Control Room or Technical Support Center. The Site Emergency Director will relieve the STED of emergency response command and control duties. The Response Manager will obtain a briefing from the Site Emergency Director or Short Term Emergency Director prior to or after reporting to an appropriate onsite or offsite reporting location. The Response Manager will notify Seabrook Station executive management. The EOF Coordinator and the Emergency News Manager will obtain a briefing from the Response Manager. The Emergency News Manager reports to the Seabrook Station site to coordinate public information needs.

[CEP - D.3]

- 1.Unusual Event (UE)
- Notification of ERO personnel. This is an information only notification and does not require activation of emergency facilities or response organizations. Any Emergency Response Facility (ERF) may be activated at the discretion of the Emergency Director. [CEP F.1.c]

NextEra sites use an automated ERO notification system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location.

The response required as a result of this declaration varies according to the specific event, but a general summary of actions taken is described below:

[CEP - E.1]

1. ERO Notification

The Emergency Director will direct or perform

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#### **Current Emergency Plan**

# On duty operating and selected Station personnel will assume the duties specified in Section 8.0:

- 2. The STED will ensure that New Hampshire State Police and Massachusetts Emergency Management Agency have been notified. In turn, the offsite warning points will notify the appropriate authorities designated in their plans:
- 3. The STED will ensure that the NRC has been notified and that a communication channel remains open until the condition has been terminated (unless permission is granted to establish a callback time);
- 4. The STED will direct the activities of the On-Shift Emergency Response Organization;
- 5. The STED will ensure activation of the digital paging system to initiate emergency notification;
- 6. The Primary Responders will respond as discussed above;
- 7. Should it be necessary, the Site Emergency Director would direct additional notifications by telephone to augment the existing ERO to the level required by the nature of the emergency condition;
- 8. If necessary, appropriate emergency medical, fire department or law enforcement agencies will be notified and requested to respond:
- The Emergency News Manager will direct 9. preparation of public information releases appropriate to the event; and
- 10. The Site Emergency Director will close out the event with a notification to offsite authorities or escalate to a more severe class.

#### **Common Emergency Plan & Site Annex**

notification of the ERO for all emergency classification levels. ERO personnel report to their assigned emergency response facilities as directed. In the event of a security threat, personnel may be instructed to respond to alternative facilities, or seek cover if on-site. [CEP - B.2]

The Emergency Director ERO position has overall command and control of a declared emergency at a NextEra site.

The Shift Manager is the individual who is onshift at all times and assumes the role of **Emergency Director upon emergency** declaration. As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures.,

The Shift Manager maintains overall command and control until relieved.

[CEP - B.2.a]

The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level.

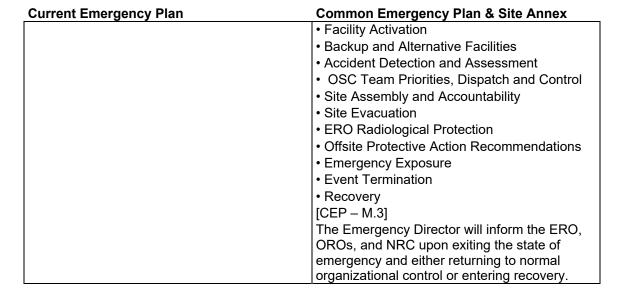
Non-delegable responsibilities include the following:

- Event declaration
- ORO and NRC Notification
- PARs for the general public
- Emergency Exposure (Dose limits and KI) Approving departures from license conditions per 10 CFR 50.54(x) transition from the Shift Manager to the Site Emergency Director upon transfer of command and control.

[CEP - B.1.a]

- 2. Technical Support Center (TSC)
- A. Site Emergency Director
- Organizational Interface and Coordination
- Federal Assistance
- Continuous Emergency Response Operations
- Command and Control
- Facility/Group Management and Supervision
- Contact and Use of External Support Services
- Integration of Offsite Agency Personnel in the
- NRC Notification and Communications
- Event Classification
- · State and Local Event Notification
- ERF Communications

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#### Disposition

The Common Emergency Plan (CEP) no longer differentiates by Primary, Subject to Call and Secondary responders. The CEP identifies minimum staff positions, non-minimum staff positions will be identified in the implementing procedures. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

The previous commitment in the current Emergency Plan to call in several ERO positions at an Unusual Event is no longer required. Review of licensing correspondence and commitments found no regulatory requirements for these actions. Changes in the EAL Scheme, communications systems and procedures ensure that the On-Shift staff can address any Emergency Plan actions required for events classified as Unusual Events. The Station and NextEra corporate offices maintain on-call duty personnel that may be contacted to assist the shift as needed. There is no guidance in NUREG 0654 R2 that calls for calling in personnel at the Unusual Event level. ERO members will still be notified that an Unusual Event has been declared, to be prepared if a higher classification is necessary and may be called in at the discretion of the Shift Manager.

# 3.2 **[Potential RIE 6-2]** Row 360 – Reduced First Aid Responder Level

#### **Current Emergency Plan Common Emergency Plan & Site Annex** Aid to Affected Personnel 10.5 **ICEP - 0.11** 10.5.1 Medical Treatment 7. First Aid – Personnel assigned as first aid Specific station personnel have been trained as responders maintain qualifications equivalent Emergency Medical Technicians (EMTs). One to Red Cross Standard First Aid techniques. Emergency Medical Technician, supplemented by at least one additional individual trained in first aid and cardio-pulmonary resuscitation, will be on site at any one time to provide 24-hour emergency response coverage.

# **Disposition**

Under CMP 99-0008, Nuclear System Operators (NSOs) will be trained in basic first aid and cardio-pulmonary resuscitation (CPR). All five NSOs assigned to a shift will be trained in first aid and CPR. Per CMP 99-0008, at least one trained NSO will be required to respond automatically with the Fire Brigade Leader to a medical emergency on back shifts. In cases where total involvement of the Fire Brigade Leader in patient care is required, Incident Command can be transferred to a responding NSO.

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# Disposition

Under CMP 99-0008, Seabrook Station will retain the capability to provide first aid to contaminated injured individuals. The onsite capability to provide first aid on a continuous basis until local support arrives will continue. Two on shift staff will continue to be available to provide rescue operations and first aid.

#### 3.3 [Potential RIE 6-3] Row 387 – Reduced ERO Testing Periodicity

#### **Current Emergency Plan**

#### 2. Communication Drills

To ensure that emergency communications equipment is operable, communication drills shall be conducted as outlined below. Included in the scope of these drills is the aspect of understanding message content. Paragraphs c, d, and g below may be performed as part of annual combined functional drills and the required biennial exercise.

- a. Communication channels with State governments within the plume exposure pathway shall be tested monthly;
- The pager system for the notification of the Primary Responders of the Emergency Response Organization (ERO) shall be tested weekly;
- c. Data transmission capability between Station emergency centers shall be tested annually:
- d. EOF communications to State Emergency Operation Centers and to Station field assessment teams shall be conducted annually;
- e. Communications between the Control Room and the NRC Headquarters Operations Center shall be tested weekly or as otherwise directed by the NRC;
- f. Communications between the EOF, TSC and the NRC Headquarters Operations Center shall be tested monthly or as otherwise directed by the NRC; and
- g. Notification of the Secondary Responders of the ERO via the automated telephone notification service shall be tested at least annually.

#### **Common Emergency Plan & Site Annex**

[CEP - N.4.f]

Each NextEra site will conduct communications drills once per calendar year.

Communications tests described in Element F.3 can be performed as drills provided they include the aspect of understanding the content of messages.

[CEP - F.3]

Communication systems testing is accomplished in accordance with Table F-1.

Table F-1: Communication System Testing Requirements

Communication System	Testing Requirement
ORO Notification System	Monthly <sup>(a)</sup>
NRC FTS (ENS) Network	Monthly (b)
ERDS	Verify Transmission Quarterly
ERO Notification System	Per Elements N.4.h and N.4.i
Field Monitoring Teams Communication	Annually <sup>(a)</sup>
Telephone System	Frequent Use (c)
Station Radio System	Frequent Use (c)
Station PA System	Frequent Use (c)
ANS	per site specific ANS Design Report

- (a) Test credit may be given by successful use in a drill.
- (b) NRC ENS in the Control Room is Frequent Use. TSC and EOF require monthly testing.
- (c) Communication systems that are listed with a testing frequency of "Frequent Use" indicate that the associated equipment is normally used at a sufficient high regularity, such that separate additional testing is not needed. ICEP N.4.il

The NextEra ERO notification is an all-call process. Each NextEra site will conduct an off-hours unannounced ERO call-in drill biennially to verify each minimum staffing ERO position meets the required Table B-1 response time. The scope of the off-hours unannounced ERO call-in drill will require collection of the ERO

notification system report which documents response within the required time.
Completion of an Element N.4.h off-hours

Completion of an Element N.4.n oπ-nours unannounced ERO report-in drill satisfies the requirements of the off-hours unannounced ERO call-in drill in this element.

The Off-Hours Call-In Drill requirement may be satisfied by an actual event provided the objectives are evaluated and documented in a critique report

Current to Proposed Emergency Plan Comparison Analysis

# **Disposition**

Notification of weekly primary responders and annual secondary responders pager test removed as the Common Emergency Plan (CEP) no longer differentiates by Primary, Subject to Call and Secondary responders. The CEP identifies minimum staff positions, non-minimum staff positions will be identified in the implementing procedures.

Neither 10 CFR 50.47, Appendix E, NUREG-0654 R1 or R2 contain criteria requiring ERO pager testing periodicity to be contained in the emergency plan.

The ERO notification system is tested several times a year during the conduct of drills and exercises. The ability to augment the on-shift response capabilities within a short period of time is demonstrated and evaluated during the drills and exercises.

The call-in drills collect response time estimates from the entire ERO. This process validates all ERO members' response time each time it is used.

The current Emergency Plan ERO pager tests are not required to comply with the 10 CFR 50.47 and Appendix E regulations.

# 3.4 [Potential RIE 6-4] Row 389 - Reduced Hospital and Ambulance Drill Participation and Periodicity

# **Current Emergency Plan**

# 12.1.2 Emergency Plan Drills

4. Medical Drills

To evaluate the response and training of the Station medical response and offsite hospital personnel, a medical drill shall be conducted annually involving a simulated contaminated individual. Although the Station medical response may be tested more frequently, the offsite response portion of medical drills may be performed as part of the biennial exercise.

# **Common Emergency Plan & Site Annex**

[CEP - N.4.a]

Each NextEra site will conduct an onsite simulated medical drill once per calendar year. The scope of the emergency medical drill will include a simulated on-site injured and contaminated individual and medical/ first aid treatment, including contamination control. Emergency Medical Drill offsite participation and periodicity for support Hospital and Ambulance services are performed in accordance with the 42 CFR 482.15 regulations and are not included in the scope of the station medical drills.

#### **Disposition**

The hospitals are accredited by The Joint Commission in compliance with 42 CFR 482.15, Condition of Participation: Emergency Preparedness. The regulations and accreditation require the hospitals to maintain an emergency plan and that the emergency preparedness program include, but not be limited to, the following elements (excerpts from the 42 CFR 482.15 regulation):

- (a) Emergency plan. The hospital must develop and maintain an emergency preparedness plan that must be reviewed, and updated at least every 2 years. The plan must do the following:
  - (1) Be based on and include a documented, facility-based and community-based risk assessment, utilizing an all-hazards approach.
  - (2) Include strategies for addressing emergency events identified by the risk assessment.
  - (4) Include a process for cooperation and collaboration with local, tribal, regional, State, and Federal emergency preparedness officials' efforts to maintain an integrated response during a disaster or emergency situation.
- (b) Policies and procedures. The hospital must develop and implement emergency preparedness policies and procedures, based on the emergency plan set forth in paragraph (a) of this section, risk assessment at paragraph (a)(1) of this section, and the communication plan at paragraph (c) of this section. The policies and procedures must be reviewed and updated at least every 2 years.

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#### **Disposition**

- (d) Training and testing. The hospital must develop and maintain an emergency preparedness training and testing program that is based on the emergency plan set forth in paragraph (a) of this section, risk assessment at paragraph (a)(1) of this section, policies and procedures at paragraph (b) of this section, and the communication plan at paragraph (c) of this section. The training and testing program must be reviewed and updated at least every 2 years.
  - (1) Training program. The hospital must do all of the following:
    - (i) Initial training in emergency preparedness policies and procedures to all new and existing staff, individuals providing services under arrangement, and volunteers, consistent with their expected role.
    - (ii) Provide emergency preparedness training at least every 2 years.
    - (iii) Maintain documentation of the training.
    - (iv) Demonstrate staff knowledge of emergency procedures.
    - (v) If the emergency preparedness policies and procedures are significantly updated, the hospital must conduct training on the updated policies and procedures.
  - (2) Testing. The hospital must conduct exercises to test the emergency plan at least twice per year. The hospital must do all of the following:
    - (i) Participate in an annual full-scale exercise that is community-based; or
      - (A) When a community-based exercise is not accessible, conduct an annual individual, facility-based functional exercise; or.
      - (B) If the hospital experiences an actual natural or man-made emergency that requires activation of the emergency plan, the hospital is exempt from engaging in its next required full-scale community-based exercise or individual, facility-based functional exercise following the onset of the emergency event.
    - (ii) Conduct an additional annual exercise that may include, but is not limited to the following:
      - (A) A second full-scale exercise that is community-based or an individual, facility-based functional exercise; or
      - (B) A mock disaster drill: or
      - (C) A tabletop exercise or workshop that is led by a facilitator and includes a group discussion, using a narrated, clinically-relevant emergency scenario and a set of problem statements, directed messages, or prepared questions designed to challenge an emergency plan.
    - (iii) Analyze the hospital's response to and maintain documentation of all drills, tabletop exercises, and emergency events, and revise the hospital's emergency plan, as needed.

Therefore, the hospitals use an all-hazards approach to determine the community-risk and priorities of its emergency response preparation (training, drills, etc.) on the risk / priority. Maintaining the Contaminated Medical Emergency Drill annual frequency, places a false priority /risk and circumvent the 42 CFR 482.15 community all-hazards regulations for the hospitals.

Ambulance services are under different regulations (primarily state regulations) but serves the same demographic and has similar community-risk and priority profile. Per the 42 CFR 482.15 regulation, the hospital's emergency plan includes cooperation and collaboration of local emergency preparedness officials and an annual full-scale community-based drill. CEP Section O.1.a, NextEra will continue to offer emergency response training annually to the ambulance service(s). Training includes basic radiation protection, the notification process for their organization, and their organization's expected role.

This change removes the requirement for hospital and ambulance participation in the annual emergency medical drill. The proposed CEP revision retains all other previous Offsite Response Organization (ORO) arrangements including offered annually training, offered participation in drills and pre-arrangements documented in Letters of Agreement (LOAs).

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#### **Disposition**

NextEra stations will continue to meet the requirements of 10 CFR 50.47(b)(14) and 10 CFR Part 50, Appendix E, Section IV.F.1. NextEra stations will continue to have arrangements with the OROs; annual training will be offered, and hospital participation in the emergency medical drill will be coordinated under 42 CFR 482.15 requirements. NextEra stations will participate in the hospital's community risk assessments to ensure the station's is properly risk evaluated and prioritized.

On-site emergency medical drill and training will be provided annually for the station's ERO. The training process/program will determine the need for additional on-site drills included in the training.

This drill participation arrangement was discussed with the OROs (hospitals and ambulance providers) and their concurrence is documented in Enclosure 10.

The 10 CFR Part 50 Appendix E and 10 CFR 50.47(b) regulations do not specify a frequency to perform the emergency medical drill. The annual frequency is specified in NUREG-0654 and provides the NRC approved guidance how to comply with the regulations. Licensees "may voluntarily use the guidance in the document to demonstrate compliance" with the NRC regulations or provide "methods or solutions that differ from those described." The alternate method of basing the drill frequency on the ORO community-risk assessment is appropriate and meets the intent of the planning standards.

The change to the emergency medical drill scope retains the annual requirement for the station while allowing the hospital and ambulance service the ability to participate under and within their regulatory requirements. This should provide a commitment which the NRC can evaluate as an acceptable alternate method to comply with 10 CFR Part 50 Appendix E and 10 CFR 50.47(b) regulations.

# 3.5 [Potential RIE 6-5] Row 401 - Removed EP Initial Training of Non-ERO Personnel

Current Emergency Plan	Common Emergency Plan & Site Annex
12.2.3 Station Personnel with No ERO	N/A
Assignment	
Station personnel with no ERO assignment	
shall be trained in their proper response to an	
emergency during Plant Access Training. This	
training shall be given on an annual basis.	

#### Disposition

R1 and R2 of NUREG-0654 do not contain criteria requiring a description of training for non-ERO/non-essential personnel within the emergency plan). No regulation, other guidance document or inspection procedure calls for a description of non-ERO general employee training to be contained in the emergency plan.

General industrial safety information, which includes awareness and expectations to normal, offnormal and emergency situations is provided to all personnel given unescorted access onto the site. General employee training for unescorted site access includes topics of safety conscious work environment (SCWE), stormwater pollution prevention (SWPP), spill prevention and control, hearing conservation, emergency plan, and fire extinguishers and is presented in the NANTel Generic Awareness and NextEra site specific site access training courses.

Site specific general awareness training scope (industrial and emergency condition related) is governed and controlled outside the emergency plan.

Emergency plan awareness content review in general employee training by personnel knowledgeable of the emergency plan is provided in document controls processes and procedures. These processes and procedures are also applicable to changes to made by other non-EP departments that could potentially impact the emergency plan.

# 3.6 [Potential RIE 6-6] Row 405 – Reduced ERO Roster Review Periodicity from Quarterly to Semiannually

# **Current Emergency Plan**

# 12.3 Review and Updating of Plan and Procedures

If not, then these agreements shall be renewed and updated; otherwise, the agreements shall be considered current. Telephone number listings associated with the Station emergency response facilities shall be reviewed quarterly and updated if necessary. Revisions shall be made in accordance with current regulations and guidelines on a continuing basis, as applicable.

#### **Common Emergency Plan & Site Annex**

[CEP - P.10]

The NextEra emergency communications directory contains select contact numbers for ORO and support organizations identified in the emergency plan and implementing procedures. The ERO call-out system contains comprehensive ERO contact information.

NextEra ERO contact information is verified semi-annually and updated as needed.

Facility and support contact information in the emergency communications directory is verified annually and updated as needed.

## Disposition

Due to the local relationships and the advancement of technology, the quarterly emergency telephone directory review is being changed to a semi-annual review. Historically, little change between quarters has occurred such that changing to a semi-annually review would have little impact on accuracy.

With cellular phones being the primary notification tool for ERO personnel, there is not nearly as many changes of phone numbers. In the past, if an individual moved their residence, their phone number likely did not travel with them as the numbers were tied to geographical regions within the city or town they were moving (land lines). With cell phones and changes to long distance billing, many people keep their same cell phone number as they move, whether across town or across country.

Most businesses or other support contacts that are listed in emergency telephone directory are established entities that do not change their business lines often enough to warrant a check every quarter. In addition, the internet is now the primary location to obtain business numbers, with these numbers readily available fewer numbers are required to be maintained in EP phone lists.

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Note: Tables and figures contained in the current emergency plan and the CEP/site annex are not included in the following comparison table. All tables and figures were reviewed for possible commitments and key items were included at the end of the comparison table.

#	Current Emergency Plan	Common Emergency Plan and Site Annex	Change Type
	Section 1.0, Introduction		
1.	The Seabrook Station Radiological Emergency Plan (SSREP) was developed in accordance with the requirements of paragraphs 50.47(b) and Appendix E to Title 10 of the Code of Federal Regulations Part 50, "Licensing of Production and Utilization Facilities." In addition, Paragraph 50.47 of 10 CFR 50 specifies that the Operating License award depends on a finding by the Nuclear Regulatory Commission as to the adequacy of both onsite and offsite emergency preparedness. To meet this requirement, the SSREP has been formulated to address planning elements which have been specified by the Nuclear Regulatory Commission (NRC) and the Federal Emergency Management Agency (FEMA) in NUREG-0654/FEMA-REP-1, Rev. 1. Exceptions to this planning guidance are documented in the Emergency Preparedness Planning Basis Document	[CEP – Introduction] The NextEra Common Emergency Plan provides the means to protect the health and safety of the general public, persons temporarily visiting or assigned to nuclear power plants operated by NextEra, and plant employees. NextEra operates the Point Beach, Seabrook Station, Saint Lucie, and Turkey Point nuclear plants.  The NextEra emergency preparedness program is based upon the requirements of 10 CFR 50.47 and 10 CFR 50 Appendix E, and the guidelines of the U.S. Nuclear Regulatory Commission (NRC) as established in NUREG-0654/FEMA-REP-1, Revision 2.  The NextEra emergency plan and site annexes are formatted using the outline numbering style of NUREG-0654 R2 to explicitly align with the 10 CFR 50.47(b) planning standards, the requirements of 10 CFR 50 Appendix E, and the elements of NUREG-0654 R2. That formatting provides a direct cross-reference to the elements of NUREG-0654 R2:	Editorial Revised description to encompass fleet use of emergency plan and document basis guidance. No added, removed or altered commitments or change of intent.
2.	The purpose of this document is to provide a reference and guidance source which:  1. Outlines the Seabrook Station Emergency Response Organization (ERO), and specifies the interfaces between and among ERO activities, and State, local, Federal and private sector organizations.  2. Assures a standard emergency classification and action level scheme which activates emergency response functions dependent upon the severity of the accident.  3. Specifies the method of notification to the offsite emergency response organizations.  4. Summarizes ERO emergency response facilities and equipment.  5. Assures that provisions exist for	The NextEra Common Emergency Plan provides the means to protect the health and safety of the general public, persons temporarily visiting or assigned to nuclear power plants operated by NextEra, and plant employees. NextEra operates the Point Beach, Seabrook Station, Saint Lucie, and Turkey Point nuclear plants.	Editorial Revised description to encompass fleet use of emergency plan and document basis guidance. No added, removed or altered commitments or change of intent.

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communications among principal response organizations.

- 6. Defines the Station's capability for assessing and monitoring actual or potential offsite radiological consequences of an emergency condition; and
- Assures that periodic training programs, exercises and drills will be conducted in order to maintain a high level of emergency preparedness at Seabrook Station.
- In support of this document, emergency operating 3. procedures will assist the Station operating staff in recognizing an emergency condition and will prescribe immediate response actions necessary to correct the condition. The emergency conditions that trigger the use of emergency operating procedures also trigger the use of an emergency classification procedure. The emergency classification procedure initiates activation of this plan in accordance with a prescribed set of emergency response procedures. The emergency implementing procedures will govern the actions undertaken by the ERO.

The formal NextEra emergency plan for each NextEra site consists of the following program and bases documents:

- NextEra Common Emergency Plan The NextEra common emergency plan identifies and describes the methods for responding to emergencies and maintaining emergency preparedness. Planning efforts common to all NextEra power reactor sites are encompassed within the NextEra common emergency plan.
- Site Emergency Plan Site Annex The site emergency plan annexes contain information and guidance that is unique to the site. The site annexes are subject to the same review and audit requirements as the common emergency plan.
- Site Emergency Action Level (EAL) Technical Basis Manual (TBM) - The EAL TBM establishes the classification scheme used to declare emergencies. The EAL TBM documents references and inputs used to determine values or events that would result in declaration of an emergency. The EAL TBM fulfills requirements of 10 CFR 50 Appendix E.IV.B.1.
- Site On-Shift Staffing Analysis The on-shift staffing analysis documents that the minimum shift crew can perform the actions required by Emergency Operating Procedures (EOP) and the emergency plan, without task overlap or overburden, prior to Emergency Response Organization (ERO) augmentation. The on-shift staffing analysis fulfills requirements of 10 CFR 50 Appendix E.IV.A.9.
- Site Evacuation Time Estimate (ETE) Study The ETE study defines the plume exposure (~10 mile)

#### Non-RIE

Revised wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format.

Added specific list of documents that constitute the formal emergency plan.

CEP Appendix 3 documents a 10 CFR 50 Appendix E.IV Cross Reference.

Regulatory references and guidance specific to an emergency plan basis document are listed in those documents.

		Emergency Planning Zone (EPZ). It documents the population within defined areas of the EPZ and establishes evacuation routes and ETEs for different scenarios for those populations. The ETE study fulfills requirements of 10 CFR 50 Appendix E.IV paragraphs 2-7.  • Site Protective Action Recommendation (PAR)  Technical Basis Manual (TBM) – The PAR TBM document the bases used to develop site-specific protective action recommendation procedures. The PAR TBM fulfills requirements of 10 CFR 50 Appendix E.IV paragraph 3.  • Site Alert and Notification System (ANS) Design Report – The ANS design report is the FEMA-approved document that contains the specific design, testing, and maintenance of the system. The ANS design report fulfills requirements of 10 CFR 50 Appendix E.IV.D.3.  Except for the NextEra Common Emergency Plan, the above documents are maintained and revised separately but as part of the site emergency plan. Any changes made that may affect or alter the emergency plan program or bases documents described above will be evaluated and made using	
4.	The SSREP and associated procedures are part of the overall emergency planning and preparedness program related to Seabrook Station. New Hampshire and Massachusetts State agencies and local civil authorities within the plume emergency planning zone (i.e., approximately a 10-mile radius) have cooperated in establishing plans and procedures for the alerting and protection of the general public in the event of a radiological emergency at Seabrook Station.	the change process in 10 CFR 50.54(q) and Regulatory Guide 1.219.  There are supporting and complementing emergency plans, including those of federal agencies; the states of Florida, New Hampshire, Wisconsin, and Massachusetts; and local government agencies that support the NextEra sites. These plans contain coordinated emergency response and preparedness instructions for declared emergencies. Each plan has been prepared and is maintained by its respective organization, and is coordinated as appropriate with the other plans.	Editorial Revised description to encompass fleet use of emergency plan and document basis guidance. No added, removed or altered commitments or change of intent.
5.	In addition, the support and capabilities of all appropriate Federal agencies would be made available to the Station, and State and local governments as specified in the National Response Framework, Nuclear/Radiological Incident Annex.	[CEP - A.1.a] 2. Federal Organizations Control, responsibility and interface of federal organizations is governed by the National Response Framework (NRF) and the Nuclear/Radiological	Editorial Wording altered to align with NUREG-0654 R2 element. No added, removed or altered commitments or change of intent.

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	Additional technical support and services can be acquired through emergency plan arrangements with industry organizations such as the Westinghouse Energy System Business Unit Emergency Response Team and the Institute of Nuclear Power Operations.	Incident Annex to the NRF when they are called to respond to an event at a nuclear power plant. The NRC acts as the lead federal agency with regard to technical matters during a nuclear incident, including providing radiological assistance.  [CEP - B.5]  1. Institute of Nuclear Power Operations (INPO)  INPO has an emergency response plan that enables it to provide the assistance in locating sources of emergency personnel, equipment, and operational analysis.  [CEP - B.5]  2. Other External (non-NextEra) Support Organizations  Other external (non-NextEra) support organizations are not used to provide additional personnel for positions on the NextEra ERO or to perform an operational role. Other external (non-NextEra) support organizations that may be requested to provide technical assistance are described in the site annexes.  [Annex - B.5]  2. Other External (non-NextEra) Support Organizations  Westinghouse (the NSSS vendor for Seabrook Station): Upon request, Westinghouse will provide emergency technical assistance, including equipment and/or services, in support of Seabrook Station in the unlikely event of an emergency.	
	Section 2.0, Definitions	Appendix 1 - Definitions	
6.		Accident: any unforeseen, or unintentional occurrence or mishap resulting in, or potentially resulting in, physical injury or injury due to radiation exposure or excessive exposure to radioactive materials.	Non-RIE Definition added to align fleet terms.
7.		Activated: an emergency response facility is declared activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions.	<b>Non-RIE</b> Definition added to align fleet terms.

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8.	Alert - Events are in process or have occurred which		Editorial
	involve an actual or potential substantial degradation in the level of safety of the plant or a security event		Removed duplication definition
	that involves probable life threatening risk to site		already in Section D of common
	personnel or damage to site equipment because of		emergency plan and EAL Technical Bases Document (TBD).
	HOSTILE ACTION. Any releases are expected to be		No added, removed or altered
	limited to small fractions of the EPA Protective Action		commitments or change of intent.
	Guideline exposure levels.		N 515
9.	Alternative Operational Support Center – An area within the EOF where OSC personnel assemble for		Non-RIE Definition removed. Current
	hostile action based events or other catastrophic		Alternative Operational Support
	events that prevent site access.		Center description documented in
			Section H of site annex.
10.	Alternative Technical Support Center - An area within		Non-RIE
	the EOF where TSC personnel assemble for hostile		Definition removed. Current
	action based events or other catastrophic events that prevent site access.		Alternative Technical Support
	prevent site access.		Center description documented in Section H of site annex.
11.	Assembly Area - The Assembly Area for backup		Non-RIE
1	response personnel and maintenance technicians is		Definition removed. Removed
	located in the Seabrook Station Conference Center at		details on second shift.
	the rear of Warehouse #1. This facility would be		No added, removed or altered
	activated only during the period from 0700 to 1630,		commitments or change of intent.
	Monday through Friday, except during planned outages when it would be opened on any shift.		
	Activation is required at an Alert or higher emergency		
	classification level.		
12.	Assessment Actions - Actions which are taken to		Non-RIE
	effectively define the emergency situation necessary		Definition removed. Term is not
	for decisions on specific emergency measures.		applicable to formal definition and
			applies before, during and post
42	Automated Telephone Notification Service - A		event.
13.	commercial, computer-based call-out service used to		Editorial  Removed duplication definition
	notify Primary, Subject-to- Call and Secondary		Removed duplication definition already in Section F of common
	Responders during back-shifts, weekends and		emergency plan and site annex.
	holidays of an Alert or higher emergency		No added, removed or altered
	classification.		commitments or change of intent.
14.		Annual: For drills and exercise periodicity, annual is	Non-RIE
		once per calendar year. For training and qualification	Added definition of annual for
		periodicity and work products, annual is every 12	

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		months not to exceed 15 months.	consistency with NRC and FEMA definition used in managing the cycle.
15.	Backup Responders - Personnel who do not initially staff an emergency response facility but are available for subsequent staffing duties (e.g., second shift). During a daytime plan activation, these personnel report to the Assembly Area.		Non-RIE Current ERO documented in Section B of common emergency plan.
16.	Committed Dose Equivalent (CDE) - The dose equivalent to an organ from an intake of radioactive material during the 50 year period following the intake.	Thyroid Committed Dose Equivalent (CDE): the dose to the thyroid that will be received from an intake of radioactive material by an individual during the 50-year period following the intake (10 CFR 20.1003).	Editorial No added, removed or altered commitments or change of intent.
17.	Committed Effective Dose Equivalent (CEDE) - The sum of the products of the weighting factors applicable to each of the body organs that are irradiated and the CDE to these organs.		Editorial Removed duplication definition already in ODCM and RP procedures No added, removed or altered commitments or change of intent.
18.		Concept of Operations: delineation of an organization's roles and responsibilities and how the organization will function to accomplish those responsibilities.	Non-RIE Definition added to align fleet terms.
19.	Corrective Actions - Emergency measures taken to ameliorate or terminate an emergency situation.		Non-RIE Definition removed. No basis for definition. Term has different common use meaning under CAP.
20.	Deep Dose Equivalent (DDE) - The external dose equivalent to the whole body at a tissue depth of 1 cm.		Editorial Removed duplication definition already in ODCM and RP procedures No added, removed or altered commitments or change of intent.
21.	Dose - A general term referring to the quantity of absorbed energy in tissue. In the SSREP, dose is used for irradiation of the whole body, unless otherwise indicated.		Editorial Removed duplication definition already in ODCM and RP procedures. No added, removed or altered commitments or change of intent.
22.	Dose Equivalent (DE) - The product of absorbed dose		Editorial

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	in tissue and the quality factor.		Removed duplication definition already in ODCM and RP procedures.  No added, removed or altered commitments or change of intent.
23.		<b>Dosimeter:</b> an instrument used to measure and record radiation doses or dose rates.	<b>Non-RIE</b> Definition added to align fleet terms.
24.	Emergency Action Level (EAL) - A pre-determined, site-specific, observable threshold for an Initiating Condition that places the Station in a given emergency class.		Editorial Removed duplication definition already in EAL TBD. No added, removed or altered commitments or change of intent.
25.	Emergency Classifications - One of a minimum set of names or titles, established by the Nuclear Regulatory Commission (NRC), for grouping offnormal nuclear power plant conditions according to (1) their relative radiological seriousness, and (2) the time-sensitive onsite and off-site radiological emergency preparedness actions necessary to respond to such conditions. The radiological emergency classes, in ascending order of seriousness, are as follows:  Unusual Event  Alert  Site Area Emergency  General Emergency		Editorial Removed duplication definition already in Section D of common emergency plan and EAL TBD. No added, removed or altered commitments or change of intent.
26.	Emergency Operating Centers (EOCs) - Areas designated by the State and local authorities as Emergency Plan facilities for their respective staffs.	<b>Emergency Operations Center (EOC):</b> a facility that is the primary base of emergency operations for an ORO in a radiological incident.	Non-RIE Definition revised to align fleet terms.
27.	Emergency Operating Procedures - The outline of specific corrective actions to be taken by Station operators in response to abnormal operating conditions.		Non-RIE Definition removed. EOP description governed by operations.
28.	Emergency Operations Facility (EOF) - A center established beyond ten miles from the Seabrook Station site where Seabrook Station emergency management directs the actions of the emergency response organization, coordinates the evaluation of offsite radiological conditions with offsite authorities, arrives at protective action recommendations, and establishes a recovery organization.		Non-RIE  Definition removed. Current EOF description documented in Section H of common emergency plan and site annex.

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29.	Emergency Planning Zones (EPZ) - The areas for which planning is recommended to assure that prompt and effective actions can be taken to protect the public in the event of an accident. The two zones are the plume exposure pathway zone (about 10 miles in radius) and the ingestion exposure pathway zone (about 50 miles in radius).	Emergency Planning Zone (EPZ): a geographic area surrounding a commercial NPP for which emergency planning is needed to ensure that prompt and effective actions can be taken by OROs to protect public health and safety in the event of a radiological incident. The plume exposure pathway EPZ is approximately 10 miles in radius, while the ingestion exposure pathway EPZ has a radius of approximately 50 miles.	Editorial Revised definition to align fleet terms. No added, removed or altered commitments or change of intent.
30.		Emergency Response Data System (ERDS): a direct near real-time electronic data link between the licensee's onsite computer system and the NRC Operations Center that provides for the automated transmission of a limited data set of selected plant parameters.	Non-RIE Definition added to align fleet terms.
31.	Emergency Response Organization (ERO) - The Seabrook Station personnel assigned and trained to implement this emergency plan.	Emergency Response Organization (ERO): the personnel assigned to perform tasks and activities associated with implementation of a licensee's emergency plan for coping with radiological incidents.	Revised definition to align fleet terms.  No added, removed or altered commitments or change of intent.
32.	Emergency Response Procedures - Procedures that outline specific actions to be taken by the Seabrook Station ERO to activate and implement this emergency plan. These procedures are contained in the Station Emergency Response Manual (SSER).		Non-RIE Definition removed. Current emergency response procedures description documented in Section P (see also Table P.7-1) of common emergency plan and site annex.
33.		<b>Evacuation Time Estimate (ETE):</b> a calculation of the time it would take to evacuate the public within the plume exposure pathway EPZ under emergency conditions.	Non-RIE Definition added to align fleet terms.
34.		Evaluation: the process of observing drill or exercise	Non-RIE
		performance to identify strengths and opportunities for improvement in an entity's emergency preparedness and response capabilities.	Definition added to align fleet terms.
35.		for improvement in an entity's emergency	Definition added to align fleet terms.  Non-RIE Definition added to align fleet terms.

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			in Section C of site annex.
37.	General Emergency - Events are in process or have occurred which involve actual or imminent substantial		Editorial Removed duplication definition
	core degradation or melting with potential for loss of containment integrity or HOSTILE ACTION that		already in Section D of common emergency plan and EAL TBD.
	results in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.		No added, removed or altered commitments or change of intent.
38.	HOSTILE ACTION - An act toward a nuclear power plant or its personnel that includes the use of violent force to destroy equipment, take hostages, and/or intimidate the licensee to achieve an end. This includes attack by air, land, or water using guns, explosives, projectiles, vehicles, or other devices used to deliver destructive force. Other acts that satisfy the overall intent may be included. HOSTILE ACTION should not be construed to include acts of civil disobedience or felonious acts that are not part of a concerted attack on the nuclear power plant. Non-terrorism-based EALs should be used to address such activities (e.g., violent acts between individuals in the owner controlled area).		Editorial Removed duplication definition already in EAL TBD. No added, removed or altered commitments or change of intent.
39.	HOSTILE FORCE - One or more individuals who are engaged in a determined assault, overtly or by stealth and deception, equipped with suitable weapons capable of killing, maiming, or causing destruction.		Non-RIE Definitions specific to Emergency Action Levels are defined in the EAL TBD.
40.	Ingestion Exposure Pathway - The pathway in which individuals receive a radiation dose due to internal deposition of radioactive materials from ingestion of contaminated water, foods, or milk.	Ingestion Exposure Pathway: the principal exposure from this pathway would be from ingestion of contaminated water or foods, such as milk or fresh vegetables.	Editorial Definition revised to align fleet terms. No added, removed or altered commitments or change of intent.
41.		Ingestion Exposure Pathway Emergency Planning Zone: a geographic area, approximately 50 miles in radius surrounding a commercial NPP.	Non-RIE Definition added to align fleet terms.
42.	Initiating Condition - One of a predetermined subset of nuclear power plant conditions where either the potential exists for a radiological emergency, or such an emergency has occurred.		Editorial Removed duplication definition already in EAL TBD. No added, removed or altered commitments or change of intent.

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43.	Joint Information Center (JIC) - A facility where news media representatives can obtain emergency news information.		Non-RIE Definition removed. Current JIC description documented in Section G of common emergency plan and site annex.
44.		Letter of Agreement (LOA): a document executed between two or more parties outlining specific arrangements relating to the accomplishment of an action. Letters of agreement may cover personnel, equipment, or other types of emergency support, and may take the form of letters, contracts, purchase orders, or other procurement mechanisms.	Non-RIE Definition added to align fleet terms
45.		Memorandum of Understanding (MOU): a document which details the respective authorities and responsibilities of the signatory organizations for specified radiological emergency response planning, preparedness, or response.	Non-RIE Definition added to align fleet terms
46.	NextEra Energy Seabrook, LLC– Managing agent of Seabrook Station.		Removed definition already in Introduction of site annex. No added, removed or altered commitments or change of intent.
47.	Non-essential Personnel - Onsite personnel who are not assigned to the Seabrook Station ERO. These personnel are evacuated from the site at an Alert or higher emergency classification.		Non-RIE  Definition removed. Evacuation process defined in Section J.  No added, removed or altered commitments or change of intent.
48.		Offsite Response Organization (ORO): state, tribal, or local governmental organization that is responsible for carrying out emergency response functions during a radiological emergency.	Non-RIE Definition added to align fleet terms.
49.		Offsite: the area outside the Protected Area.	Non-RIE Definition added to align fleet terms.
50.		Onsite: the area inside the Protected Area.	Non-RIE Definition added to align fleet terms.
51.	Operational Support Center - An emergency center established for the assembly and dispatch of available skilled emergency personnel (e.g., additional Station operations and support personnel) in support of onsite emergency operations.		Non-RIE Definition removed. Current OSC description documented in Section H of common emergency plan and site annex.

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52.		Owner Controlled Area (OCA): That portion of company property surrounding and including the station which is subject to limited access and control as deemed appropriate.	Non-RIE Definition added to align fleet terms.
53.		Planning Standard (PS): one of the 16 emergency preparedness planning standards established in 10 CFR 50.47(b) that the emergency plan must meet and which are supported by the corresponding sections of 10 CFR 50 Appendix E.	Non-RIE Definition added to align fleet terms.
54.	Plume Exposure Pathway - The pathway in which individuals receive a radiation dose due to (a) whole body external exposure due to gamma radiation from the plume and from deposited material, and (b) inhalation exposure from the passing radioactive plume.	Plume Exposure Pathway: a term describing the means by which whole body radiation exposure occurs as a result of immersion in a gaseous release of radioactive material. The principal exposure sources from this pathway are: (a) whole body external exposure to gamma radiation from the plume and from deposited materials, and (b) inhalation exposure from the passing radioactive plume. The duration of principal potential exposures could range in length from 30 minutes to days.	Editorial Definition revised to align fleet terms. No added, removed or altered commitments or change of intent.
55.		Plume Exposure Pathway Emergency Planning Zone: a geographic area approximately 10 miles in radius surrounding a commercial NPP.	Non-RIE Definition added to align fleet terms.
56.		<b>Post-Plume Phase:</b> includes response activities that occur after a release has been terminated. Also known as the "Environmental Phase".	Non-RIE Definition added to align fleet terms.
57.		Potassium lodide (KI): a prophylactic compound containing a stable (i.e., non-radioactive) form of iodine that can be used effectively to block the uptake of radioactive iodine by the thyroid gland in a human being.	Non-RIE Definition added to align fleet terms.
58.	Primary Responders - The eight ERO positions that are staffed on a rotating duty basis. These positions are notified by pager, respond to any emergency, and include the Site Emergency Director, Operations Technician, Technical Services Coordinator, Health Physics Coordinator, Response Manager, EOF Coordinator, ERO Technical Liaison and Emergency News Manager. Primary Responders are also notified by the automated telephone notification service during back-shifts, weekends and holidays of an Alert or higher emergency classification level.		Potential RIE 6-1 Refer to assessment Section 3.1 for the disposition of this item.

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59.	Projected Dose - The amount of radiation dose estimated at the onset of the accident. It includes all the dose an individual would receive for the duration of the accident assuming no protective measures were undertaken.		Non-RIE Definition removed. Section I.1.b of the CEP discusses estimation of projected doses.
60.	Protective Actions - Emergency measures to be taken by the public to mitigate the consequences of an accident by minimizing the radiological doses that may occur if such actions were not undertaken. Protective actions would be warranted provided the reduction in the individual dose is not offset by excessive risks to individual safety in implementing such actions.	Protective Action Recommendation (PAR): a formal advisement from a NPP licensee to state and/or county government officials, or from state officials to other offsite officials, concerning emergency measures that should be taken to protect the public from exposure to radiation.	Editorial Definition revised to align fleet terms. No added, removed or altered commitments or change of intent.
61.		Protected Area: the area (within the Owner Controlled Area) occupied by the nuclear unit(s) and associated equipment and facilities enclosed within the security perimeter fence. The area within which accountability of personnel is maintained in an emergency when required.	Non-RIE Definition added to align fleet terms.
62.	Protective Action Guides (PAG) - Pre-established radiological dose values to the public which warrant protective actions following an uncontrolled release of radioactive material.	Protective Action Guide (PAG): The projected dose to an individual, resulting from a radiological incident at which a specific protective action to reduce or avoid that dose is warranted.	Editorial Definition revised to align fleet terms. No added, removed or altered commitments or change of intent.
63.		Radioprotective Drug: a chemical compound or substance serving to protect or aid in protecting against the injurious effects of radiation.	Non-RIE Definition added to align fleet terms.
64.		Reasonable Assurance: a determination that ORO and utility plans and preparedness are adequate to protect public health and safety in the emergency planning areas of commercial NPPs.	Non-RIE Definition added to align fleet terms.
65.		Reception Center: a pre-designated facility located outside the plume exposure pathway EPZ at which the evacuated public can register; receive radiation monitoring and decontamination; receive assistance in contacting others; receive directions to congregate care centers; reunite with others; and receive general information. It generally refers to a facility where monitoring, decontamination, and registration of evacuees are conducted. A reception center is also referred to as a registration center or public	Non-RIE Definition added to align fleet terms.

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		registration and decontamination center.	
66.	Recovery Actions - Actions taken once the emergency condition has been controlled in order to restore stable Station conditions.		Non-RIE Definition removed. No basis for definition. Term not limited to plant restoration.
67.	Remote Monitoring and Decontamination Area - This area is located onsite. It will be activated in the event that a radiological release occurs prior to the evacuation of site personnel, and that the prevailing wind conditions at the time make it possible for site evacuees to be contaminated.		Non-RIE Definition removed. Current Remote Monitoring and Decontamination Area description documented in Section J of the site annex.
68.	Secondary Responders - ERO positions that are not staffed on a rotating duty basis. These positions are activated at an Alert or higher emergency classification. Secondary responders are notified by pager and, during back-shifts, weekends and holidays, by the automated telephone notification service of an Alert or higher emergency classification level.		Non-RIE Definition removed. The Common Emergency Plan (CEP) no longer differentiates by Primary, Subject to Call and Secondary responders. The CEP identifies minimum staff positions, non-minimum staff positions will be identified in the implementing procedures. Current ERO documented in Section B of common emergency plan.  Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
69.	Site - Seabrook Station property situated on a 900- acre tract of land on the western shore of Hampton Harbor in Rockingham County.		Non-RIE  Definition removed. Current site description documented in Introduction of site annex.
70.		<b>Site Boundary:</b> the line beyond which the land or property is not owned or controlled by the licensee.	Non-RIE Definition added to align fleet terms.
71.	Site Area Emergency -Events are in process or have occurred that involve actual or likely major failures in plant functions needed for protection of the public or HOSTILE ACTION that results in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2)		Editorial Removed duplication definition already in Section D of common emergency plan and EAL TBD. No added, removed or altered commitments or change of intent.

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72.	prevent effective access to , equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed the EPA Protective Action Guideline exposure levels beyond the site boundary.  Station Emergency Response Manual (SSER) - The manual containing all Emergency Response Procedures.		Non-RIE Definition removed. Current emergency response procedures description documented in Section P (see also Table P.7-1) of
73.	Subject-to-Call Responders - ERO positions that are not staffed on a rotating basis. Subject-to-Call Responders are expected to report on an all-call basis to activate emergency facilities at an Alert or higher emergency classification level. Subject-to-Call Responders are notified by pager and, during backshifts, weekends and holidays, by the automated telephone notification service of an Alert or higher emergency classification level.		common emergency plan and site annex.  Non-RIE The Common Emergency Plan (CEP) no longer differentiates by Primary, Subject to Call and Secondary responders. The CEP identifies minimum staff positions, non-minimum staff positions will be identified in the implementing procedures. Current ERO documented in Section B of common emergency plan. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
74.	Technical Support Center (TSC) - An in-station emergency center established in close proximity to the Control Room that has the capability to acquire parameters for post-accident evaluation by technical and recovery assistance personnel. Onsite emergency response activities are directed from the TSC.		Non-RIE Definition removed. Current TSC description documented in Section H of common emergency plan and site annex.
75.	Total Effective Dose Equivalent (TEDE) - The sum of the deep dose equivalent (DDE) for external exposures and the committed effective dose equivalent (CEDE) for internal exposures.	Total Effective Dose Equivalent (TEDE): the sum of the deep dose equivalent (for external exposures) and committed effective dose equivalent (for internal exposures).	No added, removed or altered commitments or change of intent.
76.		Transient Population: persons who do not	Non-RIE

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		permanently reside in the plume exposure pathway EPZ, but may be present during an emergency.	Definition added to align fleet terms.
77.	Unusual Event -Events are in process or have occurred which indicate a potential degradation in the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.  Section 3.0, Radiological Emergency Plan Summary		Editorial Removed duplication definition already in Section D of common emergency plan and EAL TBD.  No added, removed or altered commitments or change of intent.
78.	3.1 Introduction The Seabrook Station Radiological Emergency Plan (SSREP) has been developed to ensure the safety of Station staff and the public in the event of degraded or failed Station safety systems. The SSREP identifies the emergency response organization, the planned actions of that organization, and the coordination of activities with local, state and federal agencies. The Station Emergency Response Manual contains emergency response procedures that implement the responsibilities and actions described in the SSREP.	[CEP – Introduction] The NextEra Common Emergency Plan provides the means to protect the health and safety of the general public, persons temporarily visiting or assigned to nuclear power plants operated by NextEra, and plant employees. NextEra operates the Point Beach, Seabrook Station, Saint Lucie, and Turkey Point nuclear plants.  The NextEra emergency preparedness program is based upon the requirements of 10 CFR 50.47 and 10 CFR 50 Appendix E, and the guidelines of the U.S. Nuclear Regulatory Commission (NRC) as established in NUREG-0654/FEMA-REP-1, Revision 2.  The NextEra emergency plan and site annexes are formatted using the outline numbering style of NUREG-0654 R2 to explicitly align with the 10 CFR 50.47(b) planning standards, the requirements of 10 CFR 50 Appendix E, and the elements of NUREG-0654 R2. That formatting provides a direct cross-reference to the elements of NUREG-0654 R2.  The formal NextEra emergency plan for each NextEra site consists of the following program and bases documents:  • NextEra Common Emergency Plan – The NextEra common emergency plan identifies and describes the methods for responding to emergencies and maintaining emergency preparedness. Planning efforts common to all NextEra power reactor sites are encompassed within the NextEra common emergency plan.	Revised introductory wording to reflect a fleet common emergency plan with station annexes and align to NUREG-0654 R2 format.  Added specific list of documents that constitute the formal emergency plan.  CEP Appendix 3 documents a 10 CFR 50 Appendix E.IV Cross Reference.  Regulatory references and guidance specific to a emergency plan basis document are listed in those documents.

- Site Emergency Plan Annex The site emergency plan annexes contain information and guidance that is unique to the site. The site annexes are subject to the same review and audit requirements as the common emergency plan.
- Site Emergency Action Level (EAL) Technical
   Basis Document (TBD) The EAL TBD
   establishes the classification scheme used to
   declare emergencies. The EAL TBD documents
   references and inputs used to determine values
   or events that would result in declaration of an
   emergency. The EAL TBD fulfills requirements of
   10 CFR 50 Appendix E.IV.B.1.
- <u>Site On-Shift Staffing Analysis</u> The on-shift staffing analysis documents that the minimum shift crew can perform the actions required by Emergency Operating Procedures (EOP) and the emergency plan, without task overlap or overburden, prior to Emergency Response Organization (ERO) augmentation. The on-shift staffing analysis fulfills requirements of 10 CFR 50 Appendix E.IV.A.9.
- Site Evacuation Time Estimate (ETE) Study –
   The ETE study defines the plume exposure (~10 mile) Emergency Planning Zone (EPZ). It documents the population within defined areas of the EPZ and establishes evacuation routes and ETEs for different scenarios for those populations. The ETE study fulfills requirements of 10 CFR 50 Appendix E.IV paragraphs 2-7.
- Site Protective Action Recommendation (PAR)
   <u>Technical Basis Manual (TBM)</u> The PAR TBM
   document the bases used to develop site specific protective action recommendation
   procedures. The PAR TBM fulfills requirements
   of 10 CFR 50 Appendix E.IV paragraph 3.
- Site Alert and Notification System (ANS) Design <u>Report</u> – The ANS design report is the FEMA- approved document that contains the specific design, testing, and maintenance of the system.

79.	3.2 Station Emergency Response Once a potential emergency condition has been identified, the Unit Supervisor notifies the Shift Manager. The Shift Manager categorizes the emergency condition into one of four emergency classifications by use of the emergency classification procedure.	The ANS design report fulfills requirements of 10 CFR 50 Appendix E.IV.D.3.  Except for the NextEra Common Emergency Plan, the above documents are maintained and revised separately but as part of the site emergency plan.  [Annex – Introduction]  This Seabrook Station (SBK) Emergency Plan Annex supplements the NextEra Common Emergency Plan by providing site specific information unique to the station. It is subject to the same change and audit requirements as the NextEra Common Emergency Plan.  [CEP - A.1.a]  1. NextEra  Emergencies are initially declared and responded to by the on-shift staff under the direction of the Shift Manager. Augmentation of the shift ERO is required at the Alert emergency classification level or higher, and discretionary at the Unusual Event emergency classification level. The ERO has the capability to expand or contract to meet the needs of the emergency.  [CEP – B.2]  The Shift Manager is the individual who is on-shift at all times and assumes the role of Emergency Director upon emergency declaration. As Emergency Director upon emergency declaration. As Emergency Director upon emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures.	Editorial Added detail. The CEP and Annexes are formatted in a 50.47(b) outline. Provided list of typical actions by ECL. No added, removed or altered commitments or change of intent.
80.	Once an emergency has been declared, the Shift Manager assumes the role of Short Term Emergency Director (STED). The STED is responsible for directing activation and notification of the emergency response organization (ERO). The extent of organization and facility activation varies with the severity and classification of the emergency. The STED will insure that an emergency classification announcement is made over the Station public	[CEP - A.1.a] 1. NextEra Emergencies are initially declared and responded to by the on-shift staff under the direction of the Shift Manager. Augmentation of the shift ERO is required at the Alert emergency classification level or higher, and discretionary at the Unusual Event emergency classification level. The ERO has the capability to expand or contract to meet the needs of the	Non-RIE Previous ERO title. Current ERO titles and responsibilities documented in Section B of common emergency plan. The CEP and Annexes are formatted in a 50.47(b) outline. Provided list of typical actions by ECL.

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	address system and that Primary Responders are notified via a pager system.	emergency. [CEP – B.2] As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures. [CEP – B.2.a] The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level. [CEP – E.1] 1. ERO Notification The Emergency Director will direct or perform notification of the ERO for all emergency classification levels. ERO personnel report to their assigned emergency response facilities as directed. In the event of a security threat, personnel may be instructed to respond to alternative facilities, or seek cover if on-site.	
81.	The STED will ensure that notifications to New Hampshire and Massachusetts state authorities are initiated within 15 minutes of the emergency declaration. Notification arrangements are shown in Figure 3.1.	[CEP E.1]  2. ORO Event Notification  NextEra, in cooperation with the OROs, has established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes are made to PARs, a notification to the OROs is made within 15 minutes.  Receipt location of notification messages is site specific. ORO notification locations are described in the site annexes.  [Annex – E.1]  2. ORO Event Notification  The following state 24/7 warning points are notified of a declared emergency at Seabrook Station:  New Hampshire State Police (NHSP)  Communications Center Dispatcher  Massachusetts Emergency Management Agency	Editorial The CEP and Annexes are formatted in a 50.47(b) outline. No added, removed or altered commitments or change of intent.

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		(MEMA) 24-hour Dispatcher	
82.	During an Unusual Event, the Primary Responders will be notified by pager. Pager notification will be either a text message or numeric code. Primary Responders are the Site Emergency Director, Operations Technician, Technical Services Coordinator, Health Physics Coordinator, Response Manager, EOF Coordinator, ERO Technical Liaison and Emergency News Manager. (Protected: Ref. NRC Inspection Report 50-443/98-03)	only notification and does not require activation of emergency facilities or response organizations. Any Emergency Response Facility (ERF) may be activated at the discretion of the Emergency Director. [CEP - F.1.c]  NextEra sites use an automated ERO notification system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location.	Potential RIE 6-1 Refer to assessment Section 3.1 for the disposition of this item.
83.	Activation of any emergency response facility at this level is at the discretion of the STED or Site Emergency Director.	<ul> <li>[CEP – D.3]</li> <li>1.Unusual Event (UE)</li> <li>Notification of ERO personnel. This is an information only notification and does not require activation of emergency facilities or response organizations. Any Emergency Response Facility (ERF) may be activated at the discretion of the Emergency Director.</li> </ul>	Editorial  No added, removed or altered commitments or change of intent.
84.	Following an Alert or higher emergency declaration, Primary, Subject-to-Call and Secondary Responders will be notified by pager, and all emergency response facilities will be activated. Pager notification will be either a text message or numeric code. In certain cases, the pager notification will be forwarded to cellular telephones as authorized by Seabrook Station for station issued cell phones or individual ERO members for personal cell phones. ERO personnel who are onsite at the time of emergency declaration may also be notified by plant announcement, activation of the site siren, the LAN emergency messaging system or by word of mouth.	[CEP – D.3]  2.Alert  • Augmentation of the shift ERO (refer to Element A.1.a) by activating the Technical Support Center, Operations Support Center and Emergency Operations Facility.  [CEP - F.1.c]  NextEra sites use an automated ERO notification system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location.  [Annex – F.1.a]  Station Paging System  A plant paging system is used for alerting in-plant	Non-RIE The Common Emergency Plan (CEP) no longer differentiates by Primary, Subject to Call and Secondary responders. The CEP identifies minimum staff positions, non-minimum staff positions will be identified in the implementing procedures. Current ERO documented in Section B of common emergency plan. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

85.	If an Alert or higher emergency is declared during a backshift, weekend or holiday, Primary, Subject-to-Call and Secondary Responders will be notified by the automated telephone notification service in addition to the pager system.	personnel of emergencies. A central control panel is located in the Control Room. The paging system is accessed through dedicated paging system-handsets which are located throughout the plant including the Control Room, Technical Support Center, Operations Support Center, and Security Guard House.  [CEP – D.3]  2.Alert  • Augmentation of the shift ERO (refer to Element A.1.a) by activating the Technical Support Center, Operations Support Center and Emergency Operations Facility.  [CEP - F.1.c]  NextEra sites use an automated ERO notification system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location.  [Annex – F.1.a]  Station Paging System	Non-RIE The Common Emergency Plan (CEP) no longer differentiates by Primary, Subject to Call and Secondary responders. The CEP identifies minimum staff positions, non-minimum staff positions will be identified in the implementing procedures. Current ERO documented in Section B of common emergency plan. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
		located in the Control Room. The paging system is accessed through dedicated paging system-handsets which are located throughout the plant including the Control Room, Technical Support Center, Operations Support Center, and Security Guard House.	
86.	The Technical Support Center (TSC) will be staffed by personnel needed to provide operational and engineering support to control room personnel. The Operational Support Center (OSC) is the location from which support personnel such as maintenance, health physics, operations, chemistry, instrumentation and control, and radwaste operations are dispatched to implement actions directed by the TSC. Alternative TSC and OSC facilities are located within the EOF. TSC and OSC personnel report there for hostile action based events or other catastrophic events that prevent site access. The Emergency Operations	[CEP – H.1] The Technical Support Center (TSC) provides a dedicated location for management and technical support to operations personnel and to relieve the operations staff of emergency response actions and communications not related to plant system manipulations. The TSC is sized to accommodate ERO responders and NRC representatives. The TSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated,	Editorial  No added, removed or altered commitments or change of intent.

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Facility (EOF) serves as the location where offsite consequences of the accident are assessed. At the EOF, dose projections will be made, field monitoring teams will be dispatched, and protective action recommendations made to state authorities. This location also serves as the headquarters for the recovery organization. The Joint Information Center serves as the facility where joint utility, state and federal press briefings will be coordinated and held to assure timely and complete accident information is made available to the public via the news media.

the TSC's primary functions include:

- Provide ERO command & control
- Continued evaluation of event conditions
- Develop and issue offsite protective actions recommendations
- Develop ORO event notifications
- Provide ENS communications with the NRC
- Display and trend plant data
- Develop response priorities and mitigative actions
- Coordination of site emergency response actions
- Provide engineering support

## [CEP - H.2]

The Operations Support Center (OSC) provides a dedicated location for coordinating and planning event response activities and for staging personnel and equipment. The OSC is sized to accommodate ERO responders.

The OSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the OSC's primary functions include:

- Provide staging area for maintenance, operations, RP, and other support personnel
- Provide for briefing, dispatch, and coordination of emergency response teams

## [CEP-H.3]

The Emergency Operations Facility (EOF) provides a dedicated location for support of the site event response activities. The EOF is sized to accommodate ERO responders and NRC, FEMA, and state representatives.

The EOF is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the EOF's primary functions include:

- Coordinate emergency response activities with federal, state, and local authorities
- Coordinate support activities performed by

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		<ul> <li>personnel brought in to assist NextEra personnel</li> <li>Perform offsite dose assessment and field monitoring activities.</li> <li>Development of dose based offsite protective actions recommendations.</li> <li>Coordination of emergency response activities with federal, state, and local authorities.</li> <li>Coordination of radiological and environmental assessment activities with offsite agencies.</li> <li>Communicate with the NRC HPN line.</li> <li>Coordinate corporate support.</li> <li>Support site acquisition of external assistance (technical, craft, admin, etc.).</li> <li>Support site acquisition of equipment, supply, and logistic resources.</li> <li>[CEP – H.5]</li> <li>A near-site JIC (outside the 10 mile EPZ) is established for each site. ERO staffing of the JIC is concurrent with other ERFs, although facility</li> </ul>	
87.	The following response arrangements apply only in the event that an Alert or higher emergency is declared during an outage, i.e., the Station is in Modes 5 or 6. The goal is to keep key outage personnel readily available to return inoperable systems to service if the availability of those systems	logistic resources.  [CEP – H.5]  A near-site JIC (outside the 10 mile EPZ) is established for each site. ERO staffing of the JIC is	
88.	would lessen or terminate the emergency conditions.  1. Due to their outage assignments, some Seabrook Station personnel may not be readily available to report for their respective Emergency		Non-RIE The common emergency plan and site annexes do not consider

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	Response Organization (ERO) assignments. Depending upon which is more effective, these individuals may be directed to respond to the emergency in either their ERO role or outage assignment role.		outage conditions differently than other plant conditions.
89.	2. Provided he or she has the necessary ERO qualifications, the on-duty Outage Control Center (OCC) Manager will assume the position of Site Emergency Director.		Non-RIE The common emergency plan and site annexes do not consider outage conditions differently than other plant conditions.
90.	3. All non-ERO personnel with outage assignments, including outage workers who are not Seabrook Station employees, will assemble in the Seabrook Station Conference Center.		Non-RIE The common emergency plan and site annexes do not consider outage conditions differently than other plant conditions.
91.	4. The onshift Outage Coordinator will confer with the Technical Services Coordinator concerning the status of outage-related work and what jobs, if any, will be resumed. The Outage Coordinator will continue to interface primarily with the Technical Services Coordinator.		Non-RIE The common emergency plan and site annexes do not consider outage conditions differently than other plant conditions.
92.	5. The onshift Outage Coordinator will dispatch an outage management representative to the Seabrook Station Conference Center. This individual will ensure that an accountability listing is generated for the assembled personnel. Personnel needed to resume outage-related work will be directed to proceed to the OSC (or the work scene) and all others to evacuate the site.		Non-RIE The common emergency plan and site annexes do not consider outage conditions differently than other plant conditions.
93.	6. Following emergency termination or declaration of Recovery, the OCC Manager will coordinate with the Site Emergency Director (if not the OCC Manager) and the Response Manager to determine the ways to communicate return-to-work instructions to outage workers (e.g., press release, vendor site managers, etc.).		Non-RIE The common emergency plan and site annexes do not consider outage conditions differently than other plant conditions.
94.	In the event an emergency classification is declared based on a security event, actions will be taken per other station procedures maintained in compliance with NRC security orders. These actions may deviate	[CEP – J.1]  NextEra maintains procedures to provide for a range of protective actions for all areas controlled by the site. Protective actions have been developed for	Editorial  No added, removed or altered commitments or change of intent.

	form and an arrange of form and the land of the standard of th		
	from actions prescribed for radiological emergencies	radiological incidents and to protect personnel during hostile actions directed at the site.	
	that are not related to security events in order to protect the health and safety of station personnel and	mostile actions directed at the site.	
	the public.		
95.	Deviations for security related events may affect the	[CEP – H.4]	Editorial
95.	call-out of emergency response personnel, method of	An alternative facility provides a location for the	No added, removed or altered
	offsite notifications, timing and extent of emergency	staging of ERO personnel in the event of a Security	commitments or change of intent
	facility activation, directions provided to station	or Hostile Action threat for each NextEra site. The	ochimical or orlange of intent
	personnel, conduct of personnel accountability, and	alternative facility may also serve as an evacuation	
	responses of federal, state and local support	location for TSC and OSC personnel should those	
	organizations.	facilities become uninhabitable.	
		[CEP – J.1]	
		NextEra maintains procedures to provide for a range	
		of protective actions for all areas controlled by the	
		site. Protective actions have been developed for	
		radiological incidents and to protect personnel during	
		hostile actions directed at the site.	
		[CEP – J.4]	
		Typically, accountability of personnel inside the	
		Protected Area is completed within 30 minutes of event declaration. Following a hostile action event,	
		the personnel accountability process is initiated	
		following containment or cessation of the threat.	
		Missing individual(s) will be identified by Security.	
		Appropriate actions will be taken to locate missing	
		individual(s). When necessary, search and rescue	
		team(s) will be dispatched to locate and, if necessary,	
		rescue missing individual(s).	
96.	As warranted by emergency conditions and by	[CEP – M.3]	Editorial
	agreement with offsite authorities, a recovery	Steps will be taken to terminate from the event, either	No added, removed or altered
	organization will be established to conduct recovery	directly or following a transition period (prior to	commitments or change of intent.
	operations. Reentry into offsite areas which had been subject to radiological effects will be coordinated	entering a state of recovery operations). Usually, the	
	between the recovery organization and offsite	Unusual Event and Alert classification levels will be	
	authorities. Public information releases regarding	directly terminated (no entry into recovery).  Items that must be considered before terminating the	
	reentry will also be coordinated.	emergency condition to either a normal or a recovery	
		organization are as follows:	
		Emergency Action Level criteria	
		Releases of radioactive materials to the	
		environment	
		In-plant radiation levels	
<u> </u>		- III Piant radiation lovoid	

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97.	3.3 Local and State Government Responses The SSREP is designed to interface with the state emergency response plans and implementing procedures of Massachusetts and New Hampshire. Local governments, in coordination with the emergency management agencies of these states, have plans which, should the need arise, contain instructions to carry out specific protective measures, dependent upon various emergency conditions.	<ul> <li>Plant stable and long term core cooling available</li> <li>Containment integrity</li> <li>Functionality and integrity of plant systems, facilities, power supplies, equipment, and instrumentation</li> <li>Fire, flood, earthquake or similar hazardous emergency conditions</li> <li>Security issues</li> <li>Site access not limited for personnel and support services</li> <li>Decisions to relax protective actions for the public will be made by the appropriate state authorities.</li> <li>When transition from an emergency to a recovery phase is necessary, the Emergency Director will designate a Recovery Manager and develop a recovery organization.</li> <li>[CEP – Introduction]</li> <li>There are supporting and complementing emergency plans, including those of federal agencies; the states of Florida, New Hampshire, Wisconsin, and Massachusetts; and local government agencies that support the NextEra sites. These plans contain coordinated emergency response and preparedness instructions for declared emergencies. Each plan has been prepared and is maintained by its respective organization, and is coordinated as appropriate with the other plans.</li> <li>[CEP - A.1.a]</li> <li>Offsite Response Organizations</li> <li>The NextEra ERO coordinates response actions with OROs. Interface between the site and the OROs is governed by their respective emergency plans, which are developed and maintained in coordination with the NextEra emergency plan. OROs are described in the site annexes.</li> </ul>	Editorial No added, removed or altered commitments or change of intent.
98.	Seabrook Station is responsible for determining and conveying specific accident information, dose assessment information and protective action recommendations to the State of New Hampshire and Commonwealth of Massachusetts. It is the	[Annex – A.1.a] 3. Offsite Response Organizations (OROs) Seabrook Station is responsible for determining and conveying specific accident information, dose assessment information and protective action	No Change

99.	responsibility the States to evaluate this information, and then determine and implement appropriate protective actions in accordance with their plans and procedures. The local governments will provide the resources needed to implement these actions. Should local resources be exhausted or additional resources needed to accomplish actions in a timely manner, state governments will provide any additional support needed.  3.4 Federal Government Response	recommendations to the State of New Hampshire and Commonwealth of Massachusetts. It is the responsibility the States to evaluate this information, and then determine and implement appropriate protective actions in accordance with their plans and procedures. The local governments will provide the resources needed to implement these actions. Should local resources be exhausted or additional resources needed to accomplish actions in a timely manner, state governments will provide any additional support needed.  [CEP – A.1.a]	Editorial
	Once notified of an emergency, the NRC will evaluate the situation and determine the appropriate NRC response. Depending on the severity of the accident, the NRC will activate all or part of the federal emergency response organization in accordance with the National Response Framework, Nuclear/Radiological Incident Annex (NRF). The NRF makes available the resources and capabilities of numerous federal agencies. Principal participants will be the NRC, Department of Energy, Environmental Protection Agency and Department of Homeland Security. Should the federal agencies respond to the site vicinity, they will establish a Federal Radiological Monitoring and Assessment Center to monitor and assess the radiological consequences and a Federal Response Center to coordinate the federal support provided during the emergency.	2. Federal Organizations Control, responsibility and interface of federal organizations is governed by the National Response Framework (NRF) and the Nuclear/Radiological Incident Annex to the NRF when they are called to respond to an event at a nuclear power plant. The NRC acts as the lead federal agency with regard to technical matters during a nuclear incident, including providing radiological assistance.	Removed information contained in the Nuclear/Radiological Incident Annex to the NRF.  No added, removed or altered commitments or change of intent.
100.	Expected Time of Arrival of the NRC Region I response would be approximately 6 hours.		Non-RIE NRC response is contained in the NRC Incident Response Plan.
	Expected federal resources are specified in NUREG-0728, NRC Incident Response Plan. NRC Region 1 will deploy resources in accordance with the response modes described in NUREG-0728.		Non-RIE Federal resources are contained in the NRC Incident Response Plan
102.	Space is designated for the NRC in the Emergency Operations Facility (EOF) in Portsmouth, NH. FTS-2001 communications links are installed for NRC use in the Technical Support Center and the EOF (see Section 7.2). Four airfields are within a one-hour drive of Seabrook Station and the EOF: Logan Airport,	[CEP – H.3] The Emergency Operations Facility (EOF) provides a dedicated location for support of the site event response activities. The EOF is sized to accommodate ERO responders and NRC, FEMA,	Non-RIE Removed reference to airfields. Federal resources are contained in the NRC Incident Response Plan

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	Boston, MA; Manchester-Boston Regional Airport, Manchester, NH; Portland Jetport, Portland, ME; and Pease International Tradeport, Portsmouth, NH.	and state representatives.  [CEP – H.1]  The TSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the TSC's primary functions include:  • Provide ENS communications with the NRC  [CEP - Table F-1]  Communication System Testing Requirement  NRC FTS (ENS) Network Monthly (b)  (b) NRC ENS in the Control Room is Frequent Use.  TSC and EOF require monthly testing	
103.	Figure 3.1 Notification Plan		Non-RIE Removed figure. Notification process described in Section E of common emergency plan and site annex.
104.	Figure 3.2 Relationship of the Seabrook Station ERO to Offsite Organizations	Figure B.4: Interrelationship of Emergency Response Organizations	Editorial Figure contained within the common emergency plan Section B. No added, removed or altered commitments or change of intent
	Section 4.0, The Area		_
105.	4.1 The Site Seabrook Station is situated on a 900 acre tract of land on the western shore of Hampton Harbor in Rockingham County, near the northern boundary of the Town of Seabrook, New Hampshire. The site is located approximately eight miles southeast of the Exeter, New Hampshire, five miles northeast of Amesbury, Massachusetts, and two miles west of the Hampton Harbor Inlet. The site is bordered on the east by an extensive saltwater marsh and is located on a point of land called "the Rocks," between two small tidal estuaries; the Brown's River and the Hunt's Island Creek. The City of Portsmouth is located approximately eleven miles north of the site while the Boston, Massachusetts metropolitan area is located	[Annex – Introduction] Seabrook Station is situated on a 900 acre tract of land on the western shore of Hampton Harbor in Rockingham County, near the northern boundary of the Town of Seabrook, New Hampshire. The site is located approximately eight miles southeast of the Exeter, New Hampshire, five miles northeast of Amesbury, Massachusetts, and two miles west of the Hampton Harbor Inlet. The site is bordered on the east by an extensive saltwater marsh and is located on a point of land called "the Rocks," between two small tidal estuaries; the Brown's River and the Hunt's Island Creek. The City of Portsmouth is located approximately eleven miles north of the site while the Boston, Massachusetts metropolitan area is located	No Change

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	approximately forty miles south-southwest of the site.	approximately forty miles south-southwest of the site.	
106.	Seabrook Station consists of a four-loop pressurized water reactor. The Station exclusion area can	[Annex – Introduction] Seabrook Station consists of a four-loop pressurized	No Change
	generally be described as a circle of 3000 foot radius,	water reactor. The Station exclusion area can	
	as shown in Figure 4.1, Site Boundaries. All the area	generally be described as a circle of 3000 foot radius.	
	within the site boundary is controlled by NextEra	All the area within the site boundary is controlled by	
	Energy Seabrook, LLC.	NextEra Energy Seabrook, LLC.	
107.	4.2 Area Characteristics, Land Use and		Editorial
	Demography 4.2.1 Area Characteristics		Removed information contained in
	Figure 4.2, Major Routes in 10 Mile Study, shows the		ETE.
	major transportation arteries within 10 miles of the		No added, removed or altered
	site. The location and orientation of principal		commitments or change of intent.
	structures within the site are shown on Figure 4.3,		
	Station Layout. The control of traffic in case of an		
	emergency on those portions of the Brown's River		
	and Hunt's Island Creek that fall within the site		
	boundary comes under the authority of the State of		
	New Hampshire.		
108.	A seasonal, overnight and daily transient population		Editorial
	during the summer period is associated with the beaches and other recreational facilities in the vicinity		Removed information contained in
	of the Seabrook Station. The coastal beaches within		ETE.
	10 miles of Seabrook Station extend from Plum Island		No added, removed or altered
	beach in Newbury, Massachusetts to Wallis Sands		commitments or change of intent.
	Beach in Rye, New Hampshire. Table 4.1, Summary		
	of Peak Population Estimates of Communities within		
	0 to 10 Miles of the Site, summarizes peak transient		
	population estimates within 0 to 10 miles of the site.		
109.	Information on the location of major medical related		Editorial
	facilities, including hospitals and nursing homes, has		Removed information contained in
	been compiled for the area within 10 miles of Seabrook Station.		ETE.
	Seablook Station.		No added, removed or altered
			commitments or change of intent.
110.	Supporting documents to the Massachusetts and		Editorial
	New Hampshire Radiological Emergency Response Plans contain listings and populations of medical-		Removed information contained in
	related facilities within the Seabrook Station EPZ.		ETE.
	Telated facilities within the Seablook Station EFZ.		No added, removed or altered
	The Book Was Birm Otate 5		commitments or change of intent.
111.	The Pow Wow River State Forest occupies		Non-RIE
	approximately 48 acres in the town of South		

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	Hampton, NH, approximately seven miles west of the site. The Parker River National Wildlife Refuge is located in the town of Newbury, Massachusetts, approximately nine miles south of the site, and has a total area of 6,403 acres.	Removed descriptive wording. No added, removed or altered commitments or change of intent.
112.	4.2.2 Uses of Adjacent Lands and Waters The Seabrook Station site is bordered on the north, east and south by marsh land extending to estuaries, streams and Hampton Harbor. The land to the west is characterized as a mix of residential, commercial, industrial and agricultural. Approximately 1.5 percent of the Town of Seabrook is designated as industrial. Water uses in the area of the plant site are mainly recreational, including the beaches in Salisbury, Seabrook, Hampton, and North Hampton, and boat docks in Hampton Harbor. Boating activity on the Hampton and Black Water Rivers, within a 2-mile radius of Seabrook Station, is concentrated within their lower stretches, in the Hampton Harbor area. Boating activity in the Atlantic Ocean is largely concentrated within two or three miles of Hampton Harbor inlet. Provisions with the U.S. Coast Guard are made by State of New Hampshire authorities to alert and control boating traffic in this area in the event of a radiological emergency at Seabrook Station.	Non-RIE Removed descriptive wording. State response is contained within the state plans. No added, removed or altered commitments or change of intent.
113.	4.2.3 Population Distribution Data from numerous sources were used in developing distributions and projections of permanent resident and transient populations within 10 miles of the Seabrook Station site. This area includes portions of New Hampshire and Massachusetts. The resident population distribution is shown in Figure 4.4, Resident Population Distribution within a 0 - 10 Mile Radius of Seabrook Station. During the summer period, a transient population is associated with the beaches and other recreational facilities in the vicinity of Seabrook Station. Figure 4.6 represents an estimate of the peak transient population during summer months within a 0-10 mile radius of Seabrook Station.	Editorial Removed information contained in ETE. No added, removed or altered commitments or change of intent.

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444	4.2 Emergency Planning Zenes		Non DIE
114.	4.3 Emergency Planning Zones In accordance with the requirements specified in 10		Non-RIE
			Determination of EPZ contained
	CFR 50.33(g), emergency planning zones have been		within regulations.
	selected based upon the knowledge of the potential		
	consequences, timing and release characteristics of a		
	spectrum of accidents, including core melt scenarios,		
	regardless of their extremely low probability of		
	occurrence. As a result, an emergency planning zone		
	concept was developed, both for the short-term		
	plume exposure and for the longer-term ingestion		
	exposure pathways.		
115.	Emergency Planning Zones (EPZs) are defined as		Non-RIE
	the areas for which planning is needed to assure that		Determination of EPZ contained
	prompt and effective actions can be taken to protect		within regulations.
	the public in the event of an accident. The choice of		
	the size of the Emergency Planning Zones represents		
	a judgement on the extent of detailed planning which		
	should be performed to assure an adequate		
	response.		
116.	Dependent upon the severity of the accident,	[CEP – J.6]	Editorial
	protective actions will generally be limited to only	NextEra sites have developed PARs, in accordance	
	portions of the designated EPZs, but should the need	with agreements made with the state agencies, for	No added, removed or altered
	arise, actions can be undertaken for the entire zone.	the plume exposure pathway EPZ that include	commitments or change of intent.
		evacuation, sheltering, and recommendations for	community of ordering
		radioprotective Potassium lodide use based on the	
		following:	
		NUREG-0654/FEMA-REP-1, Supplement 3,	
		Guidance for Protective Action Strategies, November	
		2011	
		• EPA-400-R-92-001, Manual of Protective	
		Action Guides and Protective Actions for Nuclear	
		Incidents, May 1992	
		Guidance for Industry, KI in Radiation	
		Emergencies, Questions and Answers, FDA,	
		December 2002	
		Potassium lodide as a Thyroidal Blocking     Apart in Padiation Emparation EDA Cuidanas	
		Agent in Radiation Emergencies, FDA Guidance,	
		November 2011	
		PARs for the general public will be based on plant	
		conditions and/or offsite dose assessment results.	
		PARs beyond the 10-mile EPZ will be developed on	

an "ad hoc basis" from projected or measured dose in excess of EPA PAGs. Because dose projection accuracy is limited by distance, actual field measurements are used to corroborate projections before issuing PARs in areas outside the 10-mile EPZ.

The PAR strategy basis document is referenced in the site annexes.

[Annex – J.6]

The Seabrook Station site specific basis adaptation of NUREG-0654 Supplement 3 PARs is documented in EP-SBK-144, SBK Protective Action Recommendation Technical Basis Manual.

- 117. In accordance with the recommended planning bases, two EPZs have been defined. The plume exposure pathway EPZ, shown in Figure 4.7, is an area designated by the jurisdictional boundaries of those communities which are within a radial distance of about 10 miles from the Station site. Table 4.4 lists communities in each state that are within the plume exposure pathway EPZ. The size of the zone is based primarily on the following considerations:
  - 1. that the projected doses estimated for most accidents would not exceed plume exposure protective action guide (PAG) levels outside the zone;
  - 2. that detailed planning within this area would provide a substantial base for expansion of response efforts in the unlikely event that this proved necessary; and
  - 3. that planning within this area recognizes all the jurisdictional restraints imposed by the zone designation.

[Annex - Introduction]

Emergency Planning for the Seabrook Station is performed within the following two Emergency Planning Zones (EPZ):

- Plume Exposure Pathway EPZ The Seabrook Station Plume Exposure EPZ approximates a 10-mile radius around the plant site and is described and illustrated in the station's Evacuation Time Estimate Study report.
- Ingestion Pathway EPZ The Seabrook Station Ingestion Pathway EPZ approximates a 50-mile radius around the plant site as illustrated below.

[Annex A.1.a.3]

d. Local Governments

Local governments within the sites' plume exposure EPZ, in coordination with the emergency management agencies of the states, maintain emergency plans which, should the need arise, contain instructions to carry out specific protective measures, dependent upon various emergency conditions

The local governments with emergency service departments and other agencies interrelated to these local governments within the 10-mile EPZ (plume exposure pathway) of Seabrook Station are:

New Hampshire

## **Editorial**

No added, removed or altered commitments or change of intent.

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Exeter

Newfields

Kinaston

Brentwood

Seabrook

Portsmouth

Greenland

Rve

 North Hampton East Kingston South Hampton Kensington Newton Hampton Hampton Falls New Castle Stratham Massachusetts Salisbury West Newbury Newburyport Amesbury Merrimac Newbury Both New Hampshire and Massachusetts, as well as the localities within the plume EPZ, have prepared plans for a response to an emergency at Seabrook Station. Refer to the state and local Emergency Operations Plans for details on their concept of operations. The ingestion exposure pathway EPZ, shown in **Editorial** 118. [Annex – Introduction] Figure 4.8, is an area extending radially outward from Emergency Planning for the Seabrook Station is No added, removed or altered the Station site to a distance of about 50 miles. The performed within the following two Emergency commitments or change of intent. size of the zone is based primarily on the Planning Zones (EPZ): consideration that the downwind range within which • Plume Exposure Pathway EPZ – The significant contamination could occur would generally Seabrook Station Plume Exposure EPZ be limited to this distance because of wind shifts and approximates a 10-mile radius around the travel periods. In addition, projected doses from plant site and is described and illustrated in contamination outside this zone would not exceed the station's Evacuation Time Estimate ingestion exposure pathway Protective Action Guide Study report. levels. Precautionary control measures relative to Ingestion Pathway EPZ – The Seabrook livestock feeds, milk products, garden produce and Station Ingestion Pathway EPZ potable water supplies will be implemented in this approximates a 50-mile radius around the area to the extent dictated by the release conditions. plant site as illustrated below. The State of New Hampshire will notify the State of [Annex A.1.a.3] Maine to coordinate ingestion exposure pathway c. The State of Maine emergency response actions. In addition, the State of Maine, which lies within the ingestion EPZ, has the capability to carry out appropriate response actions. These plans describe their respective responsibilities, authorities. capabilities, and emergency functions.

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119.	Table 4.1 Summary of Peak Population Estimates of			Editorial
	Communities within 0 to 10 Miles of the Site			Removed information contained in ETE.
				No added, removed or altered commitments or change of intent.
120.	Table 4.4 Communities within the Seabrook Station Plume Exposure Pathway Emergency Planning Zone	[Annex A.1.a.3] d. Local Governments New Hampshire • Seabrook • Portsmouth • Greenland • Rye • North Hampton • South Hampton • Hampton • Hampton • Hampton Falls • Stratham Massachusetts • Salisbury • Newburyport • Newbury	<ul> <li>Exeter</li> <li>Newfields</li> <li>Brentwood</li> <li>Kingston</li> <li>East Kingston</li> <li>Kensington</li> <li>Newton</li> <li>New Castle</li> <li>West Newbury</li> <li>Amesbury</li> <li>Merrimac</li> </ul>	Editorial Figure contained within the annex Section A. No added, removed or altered commitments or change of intent
121.	Figure 4.1 Site Boundaries			Editorial  Removed Figure contained in UFSAR.  No added, removed or altered commitments or change of intent.
122.	Figure 4.2 Major Routes in 10 Mile Study			Editorial  Removed information contained in ETE.  No added, removed or altered commitments or change of intent.
123.	Figure 4.3 Site Layout			Editorial Removed Figure contained in UFSAR. No added, removed or altered commitments or change of intent.
124.	Figure 4.4 2010 Resident Population Distribution within a 0-10 Mile Radius of Seabrook Station			Editorial  Removed information contained in

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			ETE.
			No added, removed or altered commitments or change of intent.
125.	Figure 4.6 Estimate Peak Transient Population (0-10		Editorial
	Miles)		Removed information contained in ETE. No added, removed or altered commitments or change of intent.
126.	Figure 4.7 Seabrook Station "Plume Exposure"	[Annex – Introduction]	Editorial
	Emergency Planning Zone	• Plume Exposure Pathway EPZ – The Seabrook Station Plume Exposure EPZ approximates a 10-mile radius around the plant site and is described and illustrated in the station's Evacuation Time Estimate Study report.	Removed illustration contained in ETE.  No added, removed or altered commitments or change of intent.
127	Figure 4.8 Seabrook Station "Ingestion Exposure"	[Annex – Introduction]	Editorial
127.	Emergency Planning Zone (County Designations)	Ingestion Pathway EPZ – The Seabrook Station Ingestion Pathway EPZ approximates a 50-mile radius around the plant site as illustrated below.	Illustration contained directly in Introduction section of the Annex. No added, removed or altered commitments or change of intent.
	Section 5.0, Emergency Classification System		
128.	Seabrook Station uses NEI 99-01, Revision 6, as the basis for the emergency classification system. The information in this chapter is derived from generic basis discussion presented in NEI 99-01, Revision 6.		Editorial Removed information contained in EAL TBD. No added, removed or altered commitments or change of intent.
	5.1 Regulatory Context Title 10, Code of Federal Regulations, Part 50 provides the regulations that govern emergency preparedness at nuclear power plants. Nuclear power reactor licensees are required to have NRC-approved "emergency response plans" for dealing with "radiological emergencies." The requirements call for both onsite and offsite emergency response plans, with the offsite plans being those approved by FEMA and used by the State and local authorities. This section deals with the utilities' approved onsite plans and procedures for response to radiological emergencies at nuclear power plants, and the links they provide to the offsite plans.		Removed detailed information regarding regulation. Regulation referenced in EAL TBD.  No added, removed or altered commitments or change of intent.
130.	Section 50.47 of Title 10 of the Code of Federal		Editorial

Current to Proposed Emergency Plan Comparison Analysis	

131.	Regulations (10 CFR 50.47), entitled "Emergency Plans," states the requirement for such plans. Part (a)(1) of this regulation states that "no operating license will be issued unless a finding is made by NRC that there is reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency."  The major portion of 10 CFR 50.47 lists "standards" that emergency response plans must meet. The	Removed detailed information regarding regulation. Regulation referenced in EAL TBD.  No added, removed or altered commitments or change of intent.  Editorial
	standards constitute a detailed list of items to be addressed in the plans. Of particular importance to this project is the fourth standard, which addresses "emergency classification" and "action levels." These terms, however, are not defined in the regulation.	Removed detailed information regarding regulation. Regulation referenced in EAL TBD.  No added, removed or altered commitments or change of intent.
132.	10 CFR 50.54, "Conditions of licenses," emphasizes that power reactor licensees must "follow, and maintain in effect, emergency plans which meet the standards in Part 50.47(b) and the requirements in Appendix E to this part." The remainder of this part deals primarily with required implementation dates.	Editorial Removed detailed information regarding regulation. Regulation referenced in EAL TBD. No added, removed or altered commitments or change of intent.
133.	10 CFR 50.54(q) allows licensees to make changes to emergency plans without prior Commission approval only if: (a) the changes do not decrease the effectiveness of the plans and (b) the plans, as changed, continue to meet 10 CFR 50.47(b) standards and 10 CFR 50 Appendix E requirements. The licensee must keep a record of any such changes. Proposed changes that decrease the effectiveness of the approved emergency plans may not be implemented without application to and approval by the Commission.	Removed detailed information regarding regulation. Regulation referenced in EAL TBD.  No added, removed or altered commitments or change of intent.
134.	10 CFR 50.72 deals with "Immediate notification requirements for operating nuclear power reactors." The "immediate" notification section actually includes three types of reports:  (1) immediately after notification of State or local agencies (for emergency classification events);  (2) one-hour reports; and, (3) four-hour reports.	Editorial Removed detailed information regarding regulation. Regulation referenced in EAL TBD. No added, removed or altered commitments or change of intent.
135.	Although 10 CFR 50.72 contains significant detail, it does not define either "Emergency Class" or "Emergency Action Level." But one-hour and four-	Editorial Removed detailed information regarding regulation. Regulation

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	hour reports are listed as "non-emergency events," namely, those which are "not reported as a declaration of an Emergency Class." Certain 10 CFR 50.72 events can also meet the Unusual event emergency classification if they are precursors of more serious events. These situations also warrant anticipatory notification of state and local officials. (See Section 3.7, "Emergency Class Descriptions".)	referenced in EAL TBD.  No added, removed or altered commitments or change of intent.
136.	By footnote, the reader is directed from 10 CFR 50.72 to 10 CFR 50 Appendix E, for information concerning "Emergency Classes."	Editorial Removed detailed information regarding regulation. Regulation referenced in EAL TBD. No added, removed or altered commitments or change of intent.
137.	10 CFR 50.73 describes the "Licensee event report system," which requires submittal of follow-up written reports within sixty days of required notification of NRC.	Editorial Removed detailed information regarding regulation. Regulation referenced in EAL TBD. No added, removed or altered commitments or change of intent.
138.	10 CFR 50 Appendix E, Section B, "Assessment Actions," mandates that emergency plans must contain "emergency action levels." EALs are to be described for: (1) determining the need for notification and participation of various agencies, and (2) determining when and what type of protective measures should be considered. Appendix E continues by stating that the EALs are to be based on: (1) in-plant conditions; (2) in-plant instrumentation; (3) onsite monitoring; and (4) offsite monitoring.	Editorial Removed detailed information regarding regulation. Regulation referenced in EAL TBD. No added, removed or altered commitments or change of intent.
139.	10 CFR 50 Appendix E, Section C, "Activation of Emergency Organization," also addresses "emergency classes" and "emergency action levels." This section states that EALs are to be based on: (1) onsite radiation monitoring information; (2) offsite radiation monitoring information; and, (3) readings from a number of plant sensors that indicate a potential emergency, such as containment pressure and the response of the Emergency Core Cooling System. This section also states that "emergency	Editorial Removed detailed information regarding regulation. Regulation referenced in EAL TBD. No added, removed or altered commitments or change of intent.

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	classes" shall include: (1) Unusual events (UNUSUAL EVENTs), (2) Alert, (3) Site Area Emergency, and (4) General Emergency.		
140.	These regulations are supplemented by various regulatory guidance documents. A significant document that has dealt specifically with EALs is NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," October 1980.		Removed detailed information regarding regulation. Regulation referenced in EAL TBD.  No added, removed or altered commitments or change of intent.
141.	5.2 Definitions Used in Developing EAL Methodology The following definitions apply to the Seabrook Station EAL methodology: EMERGENCY CLASS: One of a minimum set of names or titles, established by the Nuclear Regulatory Commission (NRC), for grouping off- normal nuclear power plant conditions according to (1) their relative radiological seriousness, and (2) the time-sensitive onsite and off-site radiological emergency preparedness actions necessary to respond to such conditions. The existing radiological emergency classes, in ascending order of seriousness, are called:  Unusual event Alert Site Area Emergency General Emergency	[CEP – D.1]  NextEra has established and maintains a standard emergency classification and emergency action level scheme. The EAL technical basis manual is referenced in the site annexes. The spectrum of postulated emergency events is categorized into the following four (4) emergency classification levels (ECLs):  Unusual Event  Alert  Site Area Emergency  General Emergency	Removed discussion, information contained in EAL TBD.  No added, removed or altered commitments or change of intent.
142.	INITIATING CONDITION (IC): One of a predetermined subset of nuclear power plant conditions where either the potential exists for a radiological emergency, or such an emergency has occurred		Editorial Removed definition, information contained in EAL TBD. No added, removed or altered commitments or change of intent.
143.	Discussion: In NUREG-0654, the NRC introduced, but does not define, the term "initiating condition." Since the term is commonly used in nuclear power plant emergency planning, the definition above has been developed and combines both regulatory intent and the greatest degree of common usage among utilities.  Defined in this manner, an IC is an emergency		Editorial Removed discussion, information contained in EAL TBD. No added, removed or altered commitments or change of intent

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	condition which sets it apart from the broad class of		
	conditions that may or may not have the potential to		
	escalate into a radiological emergency. It can be a		
	continuous, measurable function that is outside		
	technical specifications, such as elevated RCS		
	temperature or falling reactor coolant level (a		
	symptom). It also encompasses occurrences such as		
	FIRE (an event) or reactor coolant pipe failure (an		
	event or a barrier breach).		
144.	EMERGENCY ACTION LEVEL (EAL): A pre-	[CEP - D.1.a]	Editorial
	determined, site-specific, observable threshold for a	Emergency Action Levels (EALs) at NextEra sites	Removed definition, information
	plant Initiating Condition that places the plant in a	have been developed in accordance with NRC	contained in EAL TBD.
	given emergency class. An EAL can be: an	endorsed guidance. This guidance and the NextEra	
	instrument reading; an equipment status indicator; a		No added, removed or altered
	measurable parameter (onsite or offsite); a discrete,	site EAL schemes have been approved by the NRC.	commitments or change of intent.
	observable event; results of analyses; entry into	If the entire EAL scheme is to be changed, then the	
1	specific emergency operating procedures; or another	new EAL scheme will be submitted to the NRC for	
		approval prior to implementation.	
	phenomenon which, if it occurs, indicates entry into a		
	particular emergency class.		Editorial
145.	Discussion:		Editorial
	The term "emergency action level" has been defined		Removed discussion, information
	by example in the regulations, as noted in the above		contained in EAL TBD.
	discussion concerning regulatory background. The		No added, removed or altered
	term had not, however, been defined operationally in		commitments or change of intent.
	a manner to address all contingencies. There are		ő
	times when an EAL will be a threshold point on a		
	measurable continuous function, such as a primary		
	system coolant leak that has exceeded technical		
	specifications for a specific plant.		
146.	5.3 Recognition Categories		Editorial
	ICs and EALs can be grouped in one of several		Removed information, contained in
	schemes. This generic classification scheme		EAL TBD.
	incorporates symptom-based, event-based, and		
	barrier-based ICs and EALs.		No added, removed or altered
	The symptom-based category for ICs and EALs refers		commitments or change of intent.
	to those indicators that are measurable over some		
	continuous spectrum, such as core temperature,		
	coolant levels, containment pressure, etc. When one		
	or more of these indicators begin to show off-normal		
	readings, reactor operators are trained to identify the		
	probable causes and potential consequences of		
	these "symptoms" and take corrective action. The		

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147.	level of seriousness indicated by these symptoms depends on the degree to which they have exceeded technical specifications, the other symptoms or events that are occurring contemporaneously, and the capability of the licensed operators to gain control and bring the indicator back to safe levels.  Event-based EALs and ICs refer to occurrences with potential safety significance, such as the failure of a high-pressure safety injection pump, a safety valve	Editorial Removed information, contained in EAL TBD.
	failure, or a loss of electric power to some part of the plant. The range of seriousness of these "events" is dependent on the location, number of contemporaneous events, remaining plant safety margin, etc.	No added, removed or altered commitments or change of intent.
148.	Barrier-based EALs and ICs refer to the level of challenge to principal barriers used to assure containment of radioactive materials contained within a nuclear power plant. For radioactive materials that are contained within the reactor core, these barriers are: fuel cladding, reactor coolant system pressure boundary, and containment. The level of challenge to these barriers encompasses the extent of damage (loss or potential loss) and the number of barriers concurrently under challenge. In reality, barrier-based EALs are a subset of symptom-based EALs that deal with symptoms indicating fission product barrier challenges. These barrier-based EALs are primarily derived from Emergency Operating Procedure (EOP) Critical Safety Function (CSF) Status Tree Monitoring (or their equivalent). Challenge to one or more barriers generally is initially identified through instrument readings and periodic sampling. Under present barrier-based EALs, deterioration of the reactor coolant system pressure boundary or the fuel clad barrier usually indicates an "Alert" condition, two barriers under challenge a Site Area Emergency, and loss of two barriers with the third barrier under challenge is a General Emergency. The fission product barrier matrix described in Category F is a hybrid approach that recognizes that some events may represent a challenge to more than one barrier, and that the containment barrier is weighted less than	Removed information, contained in EAL TBD.  No added, removed or altered commitments or change of intent.

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	the reactor coolant system pressure boundary and	
149.	the fuel clad barriers.  Symptom-based ICs and EALs are most easily identified when the plant is in a normal startup, operating or hot shutdown mode of operation, with all of the barriers in place and the plant's instrumentation and emergency safeguards features fully operational as required by technical specifications. It is under these circumstances that the operations staff has the most direct information of the plant's systems, displayed in the main control room. As the plant moves through the decay heat removal process	Editorial Removed information, contained in EAL TBD. No added, removed or altered commitments or change of intent.
	toward cold shutdown and refueling, barriers to fission products are reduced (i.e., reactor coolant system pressure boundary may be open) and fewer of the safety systems required for power operation are required to be fully operational. Under these plant operating modes, the identification of an IC in the plant's operating and safety systems becomes more event-based, as the instrumentation to detect symptoms of a developing problem may not be fully effective; and engineered safeguards systems, such as the Emergency Core Cooling System (ECCS), are partially disabled as permitted by the plant's Technical Specifications.	
150.	Barrier-based ICs and EALs also are heavily dependent on the ability to monitor instruments that indicate the condition of plant operating and safety systems. Fuel cladding integrity and reactor coolant levels can be monitored through several indicators when the plant is in a normal operating mode, but this capability is much more limited when the plant is in a refueling mode, when many of these indicators are disconnected or off-scale. The need for this instrumentation is lessened, however, and alternate instrumentation is placed in service when the plant is shut down.	Editorial Removed information, contained in EAL TBD. No added, removed or altered commitments or change of intent.
151.	It is important to note that in some operating modes there may not be definitive and unambiguous indicators of containment integrity available to control room personnel. For this reason, barrier-based EALs should not place undue reliance on assessments of	Editorial Removed information, contained in EAL TBD. No added, removed or altered

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	a sufficiency of informity in all an arcting modes	and the same and an area of intent
	containment integrity in all operating modes.	commitments or change of intent.
	Generally, Technical Specifications relax maintaining	
	containment integrity requirements in modes 5 and 6	
	in order to provide flexibility in performance of specific	
	tasks during shutdown conditions. Containment	
	pressure and temperature indications may not	
	increase if there is a pre-existing breach of	
	containment integrity. At most plants, a large portion	
	of the containment's exterior cannot be monitored for	
	leakage by radiation monitors.	
1-0	0 ,	P -1141 - 1
152.	Several categories of emergencies have no	Editorial
	instrumentation to indicate a developing problem, or	Removed information, contained in
	the event may be identified before any other	EAL TBD.
	indications are recognized. A reactor coolant pipe	No added, removed or altered
	could break; FIRE alarms could sound; radioactive	commitments or change of intent.
	materials could be released; and any number of other	Communents of change of intent.
	events can occur that would place the plant in an	
	emergency condition with little warning. For	
	emergencies related to the reactor system and safety	
	systems, the ICs shift to an event based scheme as	
	the plant mode moves toward cold shutdown and	
	refueling modes. For non-radiological events, such as	
	FIRE, external floods, wind loads, etc., as described	
	in NUREG-0654 Appendix 1, event-based ICs are the	
	norm.	
153.	In many cases, a combination of symptom-, event-	Editorial
1001	and barrier-based ICs will be present as an	Demoved information, contained in
	emergency develops. In a loss of coolant accident	Removed information, contained in EAL TBD.
	(LOCA), for example:	
	Coolant level is dropping; (symptom)	No added, removed or altered
		commitments or change of intent.
	There is a leak of some magnitude in the	
	system (pipe break, safety valve stuck open) that	
	exceeds plant capabilities to make up the loss;	
	(barrier breach or event)	
	<ul> <li>Core (coolant) temperature is rising;</li> </ul>	
	(symptom) and	
	• At some level, fuel failure begins with	
	indicators such as high coolant activity samples, etc.	
	(barrier breach or symptom)	
154.	5.4 Emergency Class Descriptions	Editorial
154.		
	There are three considerations related to emergency	Removed information, contained in
	classes. These are:	EAL TBD.

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	<ol> <li>The potential impact on radiological safety, either as now known or as can be reasonably projected;</li> <li>How far the plant is beyond its predefined design, safety, and operating envelopes; and</li> <li>Whether or not conditions that threaten health are expected to be confined to within the site boundary.</li> </ol>		No added, removed or altered commitments or change of intent.
155.	The ICs deal explicitly with radiological safety impact by escalating from levels corresponding to releases within regulatory limits to releases beyond EPA Protective Action Guideline (PAG) plume exposure levels. In addition, the "Discussion" sections below include offsite dose consequence considerations which were not included in NUREG-0654 Appendix 1.		Editorial Removed information, contained in EAL TBD. No added, removed or altered commitments or change of intent.
156.	UNUSUAL EVENT: Events are in process or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.	[CEP – D.1] 1. Unusual Event (UE) Events are in progress or have occurred which indicate a potential degradation of the level of safety of the plant or indicate a security threat to facility protection has been initiated. No releases of radioactive material requiring offsite response or monitoring are expected unless further degradation of safety systems occurs.	Editorial Corrected incorrect word. No added, removed or altered commitments or change of intent.
157.	Discussion: Potential degradation of the level of safety of the plant is indicated primarily by exceeding plant technical specification Limiting Condition of Operation (LCO) allowable action statement time for achieving required mode change. Precursors of more serious events should also be included because precursors do represent a potential degradation in the level of safety of the plant. Minor releases of radioactive materials are included. In this emergency class, however, releases do not require monitoring or offsite response.		Editorial Removed information from common emergency plan. Considerations for classification contained in EAL TBD. No added, removed or altered commitments or change of intent.
158.	ALERT: Events are in process or have occurred which involve an actual or potential substantial degradation of the level of safety of the plant or a security event that involves probable life threatening risk to site personnel or damage to site equipment because of HOSTILE ACTION. Any releases are	[CEP - D.1] 2. Alert Events are in progress, or have occurred, which involve an actual or potential substantial degradation of the level of safety of the plant or a security event	Editorial No added, removed or altered commitments or change of intent.

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	expected to be limited to small fractions of the EPA Protective Action Guideline exposure levels.	that involves probable life-threatening risk to site personnel or damage to site equipment because of hostile action. Any releases are expected to be small fractions of the EPA Protective Action Guideline exposure levels.	
159.	Discussion: Rather than discussing the distinguishing features of "potential degradation" and "potential substantial degradation," a comparative approach would be to determine whether increased monitoring of plant functions is warranted at the Alert level as a result of safety system degradation. This addresses the operations staff's need for help, independent of whether an actual decrease in plant safety is determined. This increased monitoring can then be used to better determine the actual plant safety state, whether escalation to a higher emergency class is warranted, or whether de-escalation or termination of the emergency class declaration is warranted. Dose consequences from these events are small fractions of the EPA PAG plume exposure levels, i.e., about 10 mrem to 100 mrem TEDE.		Removed information from common emergency plan. Considerations for classification contained in EAL TBD.  No added, removed or altered commitments or change of intent.
160.	SITE AREA EMERGENCY: Events are in process or have occurred which involve an actual or likely major failures of plant functions needed for protection of the public or HOSTILE ACTION that results in intentional damage or malicious acts; (1) toward site personnel or equipment that could lead to the likely failure of or; (2) that prevent effective access to equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA Protective Action Guideline exposure levels beyond the site boundary.	[CEP - D.1] 3. Site Area Emergency (SAE) Events are in progress or have occurred which involve actual or likely major failures of plant functions needed for protection of the public or hostile action that results in intentional damage or malicious acts; 1) toward site personnel or equipment that could lead to the likely failure of or; 2) that prevent effective access to, equipment needed for the protection of the public. Any releases are not expected to result in exposure levels which exceed EPA PAG exposure levels beyond the site boundary.	Editorial  No added, removed or altered commitments or change of intent.
161.	Discussion: The discriminator (threshold) between Site Area Emergency and General Emergency is whether or not the EPA PAG plume exposure levels are expected to be exceeded outside the site boundary. This threshold, in addition to dynamic dose assessment considerations discussed in the EAL guidelines,		Editorial Removed information from common emergency plan. Considerations for classification contained in EAL TBD. No added, removed or altered commitments or change of intent.

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162.	clearly addresses NRC and offsite emergency response agency concerns as to timely declaration of a General Emergency.  GENERAL EMERGENCY: Events are in process or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or HOSTILE ACTION that results in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA Protective Action Guideline exposure levels offsite for more than the immediate site area.	[CEP – D.1]  4. General Emergency (GE) Events are in progress or have occurred which involve actual or imminent substantial core degradation or melting with potential for loss of containment integrity or hostile actions that result in an actual loss of physical control of the facility. Releases can be reasonably expected to exceed EPA PAG exposure levels offsite for more than the immediate site area	Editorial Corrected incorrect word. No added, removed or altered commitments or change of intent.
163.	Discussion: The bottom line for the General Emergency is whether evacuation or sheltering of the general public is indicated based on EPA PAGs, and therefore should be interpreted to include radionuclide release regardless of cause. To better assure timely notification, EALs in this category must primarily be expressed in terms of plant function status, with secondary reliance on dose projection. In terms of fission product barriers, loss of two barriers with loss or potential loss of the third barrier constitutes a General Emergency.		Removed information from common emergency plan. Considerations for classification contained in EAL TBD.  No added, removed or altered commitments or change of intent.
164.	5.5 Emergency Class Thresholds The most common bases for establishing these boundaries are the technical specifications and setpoints for each plant that have been developed in the design basis calculations and the Updated Final Safety Analysis Report (UFSAR).		Editorial Removed information, contained in EAL TBD. No added, removed or altered commitments or change of intent.
165.	For those conditions that are easily measurable and instrumented, the boundary is likely to be the EAL (observable by plant staff, instrument reading, alarm setpoint, etc.) that indicates entry into a particular emergency class. For example, the main steam line radiation monitor may detect high radiation that triggers an alarm. That radiation level also may be the setpoint that closes the main steam isolation valves (MSIV) and initiates the reactor trip. This same radiation level threshold, depending on plant-specific parameters, also may be the appropriate EAL for a		Editorial Removed information, contained in EAL TBD. No added, removed or altered commitments or change of intent.

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	direct entry into an emergency class.	
166.	In addition to the continuously measurable indicators,	Editorial
	such as coolant temperature, coolant levels, leak	Removed information, contained in
	rates, containment pressure, etc., the UFSAR	EAL TBD.
	provides indications of the consequences associated	No added, removed or altered
	with design basis events. Examples would include	commitments or change of intent.
	steam pipe breaks, MSIV malfunctions, and other	deministration of orlange of intent.
	anticipated events that, upon occurrence, place the	
	plant immediately into an emergency class.	
167.	Another approach for defining these boundaries is the	Editorial
	use of a plant-specific probabilistic safety assessment	Removed information, contained in
	(PSA - also known as probabilistic risk assessment,	EAL TBD.
	PRA). A PSA has been completed for Seabrook	No added, removed or altered
	Station. PSAs can be used as a good first	commitments or change of intent.
	approximation of the relevant ICs and risk associated	deministration of orlange of intent.
	with emergency conditions for existing plants.	
	Generic insights from PSAs and related severe	
	accident assessments which apply to EALs and	
	emergency class determinations are:	
168.	1. Prolonged loss of all AC power events are	Editorial
	extremely important. This would indicate that should	Removed information, contained in
	this occur, and AC power is not restored within 15	EAL TBD.
	minutes, entry into the emergency class at no lower	No added, removed or altered
	than a Site Area Emergency, when the plant was	commitments or change of intent.
	initially at power, would be appropriate. This implies	Committee of Grange of Interna
	that precursors to loss of all AC power events should	
	appropriately be included in the EAL structure.	
169.	2. For severe core damage events,	Editorial
	uncertainties exist in phenomena important to	Removed information, contained in
	accident progressions leading to containment failure.	EAL TBD.
	Because of these uncertainties, predicting	No added, removed or altered
	containment integrity may be difficult in these	commitments or change of intent.
	conditions. This is why maintaining containment	
	integrity alone following sequences leading to severe	
	core damage may be an insufficient basis for not	
	escalating to a General Emergency.	
170.	3. EAL methodology must be sufficiently	Editorial
	rigorous to cover risk-significant sequences such as	Removed information, contained in
	containment bypass, large LOCA with early	EAL TBD.
	containment failure, station blackout greater than 4	No added, removed or altered
	hours (e.g., LOCA consequences of Station	commitments or change of intent.
	Blackout), and reactor coolant pump seal failure.	The state of the s

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171.	Another critical element of the analysis to arrive at	Editorial
	these threshold (boundary) conditions is the time that	Removed information, contained in
	the plant might stay in that condition before moving to	EAL TBD.
	a higher emergency class. In particular, station	No added, removed or altered
	blackout coping analyses performed in response to	commitments or change of intent.
	10 CFR 50.63 and Regulatory Guide 1.155, "Station	communicities of change of internal
	Blackout," is used to determine whether a Site Area	
	Emergency or a General Emergency is indicated. The	
	time dimension is critical to the EAL since the	
	purpose of the emergency class for state and local	
	officials is to notify them of the level of mobilization	
	that may be necessary to handle the emergency.	
	This is particularly true when a "Site Area	
	Emergency" or "General Emergency" is imminent.	
172.	Regardless of whether or not containment integrity is	Editorial
	challenged, it is possible for significant radioactive	Removed information, contained in
	inventory within containment to result in EPA PAG	EAL TBD.
	plume exposure levels being exceeded even	No added, removed or altered
	assuming containment is within technical specification	commitments or change of intent.
	allowable leakage rates. With or without containment	or sharing of mitorit.
	challenge, however, a major release of radioactivity	
	requiring offsite protection actions from core damage	
	is not possible unless a major failure of fuel cladding	
	allows radioactive material to be released from the	
	core into the reactor coolant. NUREG-1228, "Source	
	Estimations During Incident Response to Severe	
	Nuclear Power Plant Accidents," indicates that such	
	conditions do not exist when the amount of clad	
	damage is less than 20%.	
173.	5.6 Emergency Action Levels	Editorial
	With the emergency classes defined, the thresholds	Removed information, contained in
	that must be met for each EAL to be placed under the	EAL TBD.
	emergency class can be determined. There are two	No added, removed or altered
	basic approaches to determining these EALs. EALs	commitments or change of intent.
	and emergency class boundaries coincide for those	
	continuously measurable, instrumented ICs, such as	
	radioactivity, core temperature, coolant levels, etc.	
	For these ICs, the EAL will be the threshold reading	
	that most closely corresponds to the emergency class	
	description using the best available information.	
174.	For discrete (discontinuous) events, the approach will	Editorial
	have to be somewhat different. Typically, in this	Removed information, contained in

		EAL TOD
	category are internal and external hazards such as	EAL TBD.
1	fire or earthquake. The purpose for including hazards	No added, removed or altered
	in EALs is to assure that station personnel and offsite	commitments or change of intent.
	emergency response organizations are prepared to	
	deal with consequential damage these hazards may	
	cause. If, indeed, hazards have caused damage to	
	safety functions or fission product barriers, this should	
	be confirmed by symptoms or by observation of such	
	failures. Therefore, it may be appropriate to enter an	
	emergency for events approaching or exceeding	
	design basis limits such as Operating Basis	
	Earthquake, design basis wind loads, FIRE within	
	VITAL AREAs, etc. This would give the operating	
1	staff additional support and improved ability to	
	determine the extent of plant damage. If damage to	
	barriers or challenges to Critical Safety Functions	
	(CSFs) have occurred or are identified, then the	
	additional support can be used to escalate or	
	terminate the Emergency Class based on what has	
	been found. Of course, security events must reflect	
1	potential for increasing security threat levels.	
175.	Plant emergency operating procedures (EOPs) are	 Non-RIE
	designed to maintain and/or restore a set of CSFs	Removed information contained in
	which are listed in the order of priority for restoration	EOPs. EOPs governed by
	efforts during accident conditions. The Seabrook	operations.
1	Station CSF set includes:	No added, removed or altered
	□ Subcriticality	
1		commitments or change of intent
1	☐ Core cooling	commitments or change of intent.
	<ul><li>□ Core cooling</li><li>□ Heat sink</li></ul>	commitments or change of intent.
		commitments or change of intent.
	☐ Heat sink	commitments or change of intent.
	<ul> <li>☐ Heat sink</li> <li>☐ Pressure-temperature-stress (RCS integrity)</li> <li>☐ Containment</li> </ul>	commitments or change of intent.
	<ul> <li>☐ Heat sink</li> <li>☐ Pressure-temperature-stress (RCS integrity)</li> <li>☐ Containment</li> </ul>	commitments or change of intent.
	<ul> <li>☐ Heat sink</li> <li>☐ Pressure-temperature-stress (RCS integrity)</li> <li>☐ Containment</li> <li>☐ RCS inventory</li> <li>☐ Emergency Coolant Recirculation</li> </ul>	commitments or change of intent.
176.	<ul> <li>☐ Heat sink</li> <li>☐ Pressure-temperature-stress (RCS integrity)</li> <li>☐ Containment</li> <li>☐ RCS inventory</li> <li>☐ Emergency Coolant Recirculation</li> <li>☐ Radiation/RDMS Display</li> </ul>	commitments or change of intent.  Non-RIE
176.	<ul> <li>☐ Heat sink</li> <li>☐ Pressure-temperature-stress (RCS integrity)</li> <li>☐ Containment</li> <li>☐ RCS inventory</li> <li>☐ Emergency Coolant Recirculation</li> <li>☐ Radiation/RDMS Display</li> </ul> There are diverse and redundant plant systems to	Non-RIE
176.	<ul> <li>☐ Heat sink</li> <li>☐ Pressure-temperature-stress (RCS integrity)</li> <li>☐ Containment</li> <li>☐ RCS inventory</li> <li>☐ Emergency Coolant Recirculation</li> <li>☐ Radiation/RDMS Display</li> <li>There are diverse and redundant plant systems to support each CSF. By monitoring the CSFs instead of</li> </ul>	Non-RIE Removed information, contained in
176.	□ Heat sink □ Pressure-temperature-stress (RCS integrity) □ Containment □ RCS inventory □ Emergency Coolant Recirculation □ Radiation/RDMS Display  There are diverse and redundant plant systems to support each CSF. By monitoring the CSFs instead of the individual system component status, the impact of	Non-RIE Removed information, contained in EOPs. EOPs governed by
176.	□ Heat sink □ Pressure-temperature-stress (RCS integrity) □ Containment □ RCS inventory □ Emergency Coolant Recirculation □ Radiation/RDMS Display  There are diverse and redundant plant systems to support each CSF. By monitoring the CSFs instead of the individual system component status, the impact of multiple events is inherently addressed, e.g., the	Non-RIE  Removed information, contained in EOPs. EOPs governed by operations.
176.	Heat sink Containment Containment RCS inventory Emergency Coolant Recirculation Radiation/RDMS Display There are diverse and redundant plant systems to support each CSF. By monitoring the CSFs instead of the individual system component status, the impact of multiple events is inherently addressed, e.g., the number of operable components available to maintain	Non-RIE Removed information, contained in EOPs. EOPs governed by operations. No added, removed or altered
	□ Heat sink □ Pressure-temperature-stress (RCS integrity) □ Containment □ RCS inventory □ Emergency Coolant Recirculation □ Radiation/RDMS Display  There are diverse and redundant plant systems to support each CSF. By monitoring the CSFs instead of the individual system component status, the impact of multiple events is inherently addressed, e.g., the	Non-RIE  Removed information, contained in EOPs. EOPs governed by operations.

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	nonetheless applicable to all emergency classes.	
181.	5.8 Emergency Class Downgrading	Editorial
	Another important aspect of usable EAL guidance is	Removed discussion, information
	the consideration of what to do when the risk posed	contained in EAL TBD.
	by an emergency is clearly decreasing. Seabrook	No added, removed or altered
	Station uses a combination approach involving	commitments or change of intent.
	recovery from General Emergencies and some Site	Communication of original go of internal
	Area Emergencies and termination from Unusual	
	Events, Alerts, and certain Site Area Emergencies	
	causing no long-term plant damage. Downgrading to	
	lower emergency classes adds notifications but may	
	have merit under certain circumstances.	
182.	5.9 Classifying Transient Events	Editorial
	For some events, the condition may be corrected	Removed information, contained in
	before a declaration has been made. For example, an	EAL TBD.
	emergency classification is warranted when automatic	No added, removed or altered
	and manual actions taken within the control room do	commitments or change of intent.
	not result in a required reactor trip. However, it is	community or onlying or internal
	likely that actions taken outside of the control room	
	will be successful, probably before the STED/SED	
	classifies the event. The key consideration in this	
	situation is to determine whether or not further plant	
	damage occurred while the corrective actions were	
	being taken. In some situations, this can be readily	
	determined, in other situations, further analyses (e.g.,	
	coolant radiochemistry sampling, may be necessary).	
183.	If the emergency-related indications completely clear	Editorial
	before a declaration of an emergency classification	Removed information, contained in
	level has been made, then no emergency	EAL TBD.
	classification is required. The Shift Manager shall	No added, removed or altered
	notify the Emergency News Manager within one hour	commitments or change of intent.
	of the termination of the emergency-related	
	indications that emergency-related indications briefly	
	existed, but cleared prior to the declaration of an	
	emergency classification. The Emergency News	
	Manager will initiate state notifications per good	
	neighbor notification procedures. The event shall be	
	reported to the NRC in accordance with 10 CFR	
	50.72 and 50.73 per LI-AA-102-1001, Regulatory	
40:	Reporting, and within 1 hour of the event.	F-114 - v1 - 1
184.	If emergency-related indications are received and	Editorial
	later cleared, and after the fact it is determined that	Removed information, contained in

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	an amount of spirits was warmented but not	EAL TRD
	an emergency classification was warranted but not	EAL TBD.
	made, then no emergency classification is required.	No added, removed or altered
	The Shift Manager shall notify the Emergency News	commitments or change of intent.
	Manager within one hour of discovery that an	
	emergency classification was warranted but not	
	declared and that emergency-related indications no	
	longer exist. The Emergency News Manager will	
	initiate state notifications per good neighbor	
	notification procedures. The event shall be reported	
	to the NRC in accordance with 10 CFR 50.72 and	
	50.73 per LI-AA-102-1001, Regulatory Reporting, and	
	within 1 hour of the event.	Edition 3-1
185.	If emergency-related indications are received and	Editorial
	reduce in severity, such that the emergency	Removed information, contained in
	classification went from an earlier higher level to a	EAL TBD.
	current lower level, the current lower level emergency should be declared.	No added, removed or altered
		commitments or change of intent.
186.	Reporting requirements of 10 CFR 50.72 are	Editorial
	applicable and the guidance of NUREG-1022, Rev. 1,	Removed information, contained in
	Section 3 should be applied.	EAL TBD.
		No added, removed or altered
		commitments or change of intent.
187.	5.10 Cold Shutdown/Refueling IC/EALs	Editorial
	Generic Letter 88–17, Loss of Decay Heat Removal,	Removed information contained in
	SECY–91–283, Evaluation of Shutdown and Low	EAL TBD.
	Power Risk Issues, SECY-93-190, Regulatory	No added, removed or altered
	Approach to Shutdown and Low–power Operation,	commitments or change of intent.
	NUREG-1449, Shutdown and Low-Power Operation	communicates of change of intent.
	at Commercial Nuclear Power Plants in the United	
	States, and NUMARC 91–06, Guidelines for Industry	
	Actions to Assess Shutdown Management, all	
	address nuclear power plant safety issues that are	
	applicable to periods when the plant is shutdown.	
	These evaluations identify a number of variables	
1	which significantly affect the probability and	
	consequences of losing decay heat removal	
	capability during shutdown periods. In addition,	
	NUREG-1449 discusses that the need to respond	
	appropriately, including emergency classification and	
	notification, still exists during cold– shutdown and	
	refueling conditions. Through use of NEI 99-01,	

Revision 6, the Seabrook Station emergency classification system addresses issues concerning shutdown effects on declaring emergencies discussed in SECY-93-190 and NUREG-1449. Given the variability of plant configurations (e.g., systems out-of-service for maintenance, containment open, reduced AC power redundancy, time since shutdown) during these periods, the consequences of any given initiating event can vary greatly. For example, a loss of decay heat removal capability that occurs at the end of an extended outage has less significance than a similar loss occurring during the first week after shutdown. Compounding these events is the likelihood that instrumentation necessary for assessment may also be inoperable. The cold shutdown and refueling EALs are based on performance capability to the extent possible with consideration given to RCS integrity, containment closure, and fuel clad integrity for the applicable modes.

The initiating conditions and example emergency actions levels associated directly with Cold Shutdown or Refueling safety function are presented in Recognition Category C, Cold Shutdown/Refueling.

## 188. 5.11 ISFSI IC/EALs

An Independent spent fuel storage installation (ISFSI) is a complex that is designed and constructed for the interim storage of spent nuclear fuel and other radioactive materials associated with spent fuel storage. The Final Rule governing Emergency Planning Licensing Requirements for Independent Spent Fuel Storage Facilities (Federal Register Volume 60, Number 120 June 22, 1995, Pages 32430-32442) indicated that a significant amount of the radioactive material contained within a cask must escape its packaging and enter the biosphere for there to be a significant environmental impact resulting from an accident involving the dry storage of spent nuclear fuel. Formal offsite planning is not required because the postulated worst-case accident involving an ISFSI has insignificant consequences to the public health and safety.

## Editorial

Removed information, contained in EAL TBD.

No added, removed or altered commitments or change of intent.

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	Recognition Category E (Events Related to ISFSI) is		
	applicable to licensees using their 10 CFR 50		
	emergency plan to fulfill the requirements of 10 CFR 72.32. The emergency classifications for Recognition		
	Category E are those provided by NUREG		
	0654/FEMA Rep.1 in accordance with 10 CFR 50.47.		
	The classification of an ISFSI event under provisions		
	of a 10 CFR 50.47 emergency plan should be		
	consistent with the definitions of the emergency		
	classes as used by that plan.		
189.	Figure 5.6 Emergency Initiating Condition Matrix –		Editorial
	Modes 1, 2, 3 and 4		Removed information, contained in EAL TBD.
			No added, removed or altered
			commitments or change of intent.
190.	Figure 5.7 Emergency Initiating Condition Matrix –		Editorial
	Modes 5, 6 and Defueled		Removed information, contained in EAL TBD.
			No added, removed or altered
			commitments or change of intent.
191.	Figure 5.8 Fission Product Barrier Degradation Matrix		Editorial
	– Modes 1, 2, 3 and 4		Removed information, contained in EAL TBD.
			No added, removed or altered
			commitments or change of intent.
	Section 6.0, Emergency F&E		
192.	Following the declaration of an emergency, the		Editorial
	activation of the Emergency Response Organization		Removed discussion and figures
	(ERO) will be accomplished within a number of		contained in the common
	dedicated emergency facilities. Figure 4.3 indicates		emergency plan, site annex and the
	the relative locations of Station facilities within the site. Figure 6.1 represents the locations of offsite		emergency preparedness facility
	support organization emergency operations centers		inventory document.
	relative to the Seabrook Station site. Descriptions of		No added, removed or altered
	Seabrook Station facilities follow in Section 6.1. A		commitments or change of intent.
	description of emergency equipment and inventories		
	is found in the Emergency Preparedness Department		
	Facility Inventory Manual (EPFI).		
193.	6.1 Emergency Centers	[Annex – H.1]	No Change
	6.1.1 Technical Support Center	A Technical Support Center (TSC) has been	

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	A Technical Support Center (TSC) has been established in the Control Building to direct post-accident evaluation and assist in recovery actions. The TSC is habitable to the same degree as the Control Room for postulated accident conditions. The TSC has the capability to access and display Station parameters, including the Safety Parameter Display System (SPDS), independent from actions in the Control Room. The TSC is included in the Station emergency communications network. The TSC has access to the Seabrook Updated Final Safety Analysis Report (UFSAR), the Seabrook Station Radiological Emergency Plan (SSREP) and procedures, and a selected set of system prints, system flow diagrams, cable/wiring diagrams and equipment specifications. The TSC has the capability to assess radiological habitability conditions by monitoring for direct radiation and airborne particulates, and sampling for airborne radioiodines.	established in the Control Building to direct post-accident evaluation and assist in recovery actions. The TSC is habitable to the same degree as the Control Room for postulated accident conditions. The TSC has the capability to access and display Station parameters, including the Safety Parameter Display System (SPDS), independent from actions in the Control Room. The TSC is included in the Station emergency communications network. The TSC has access to the Seabrook Updated Final Safety Analysis Report (UFSAR) and station procedures, and a selected set of system prints, system flow diagrams, cable/wiring diagrams and equipment specifications. The TSC has the capability to assess radiological habitability conditions by monitoring for direct radiation and airborne particulates, and sampling for airborne radioiodines.	
	Figure 8.6 defines the TSC organization. The TSC and TSC Document Control Center are depicted in Figure 6.2.	[Annex – H.1] A Technical Support Center (TSC) has been established in the Control Building to direct post-accident evaluation and assist in recovery actions. The TSC is habitable to the same degree as the Control Room for postulated accident conditions. The TSC has the capability to access and display Station parameters, including the Safety Parameter Display System (SPDS), independent from actions in the Control Room. The TSC is included in the Station emergency communications network. The TSC has access to the Seabrook Updated Final Safety Analysis Report (UFSAR) and station procedures, and a selected set of system prints, system flow diagrams, cable/wiring diagrams and equipment specifications. The TSC has the capability to assess radiological habitability conditions by monitoring for direct radiation and airborne particulates, and sampling for airborne radioiodines.	Removed figures. ERO defined in Section B of the common emergency plan. No added, removed or altered commitments or change of intent.
195.	An alternative facility for TSC responders has been identified in the EOF for hostile action based events or other catastrophic events that prevent site access in accordance with 10 CFR 50 Appendix E, Section	[Annex H.4] An alternative facility for TSC responders has been identified as a designated area in the EOF for hostile	No Change

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	IV, E, 8, d. Procedures for TSC responders are located in the alternative facility.	action-based events or other catastrophic events that prevent site access in accordance with 10 CFR 50 Appendix E, Section IV, E, 8, d. Procedures for TSC responders are located in the alternative facility.	
196.	6.1.2 Operational Support Center The Operational Support Center (OSC), located on the first floor of the Administration and Service Building, provides a general assembly/dispatch area for assigned Station manpower needed to effect protective and corrective actions in support of the emergency situation. The OSC is included in the Station emergency communications network.	[Annex – H.2] The Operations Support Center (OSC), located on the first floor of the Administration and Service Building, provides a general assembly/dispatch area for assigned Station manpower needed to effect protective and corrective actions in support of the emergency situation. The OSC is included in the Station emergency communications network.	No Change
197.	Emergency equipment is provided at the Radiological Controlled Area (RCA) access point located within the OSC. Tools required by repair teams are provided at tool cribs maintained by the Maintenance Department in the RCA and other locations in the plant. Should conditions warrant evacuation of this center, the TSC will assume OSC functions; otherwise the OSC will remain active and staffed until terminated by the Site Emergency Director. Figure 8.5 defines the OSC organization. A layout of the OSC is provided in Figure 6.5.	[Annex - H.2] Emergency equipment is provided at the Radiological Controlled Area (RCA) access point located within the OSC. Tools required by repair teams are provided at tool cribs maintained by the Maintenance Department in the RCA and other locations in the plant. Should conditions warrant evacuation of this center, the TSC will assume OSC functions; otherwise the OSC will remain active and staffed until terminated by the Site Emergency Director.	Editorial Removed figures. ERO defined in Section B of the common emergency plan. No added, removed or altered commitments or change of intent.
198.	An alternative facility for OSC responders has been identified in the EOF for hostile action based events or other catastrophic events that prevent site access in accordance with 10 CFR 50 Appendix E, Section IV, E, 8, d. Procedures for OSC responders are located in the alternative facility.	[Annex – H.4] An alternative facility for OSC responders has been identified as a designated area in the EOF for hostile action-based events or other catastrophic events that prevent site access in accordance with 10 CFR 50 Appendix E, Section IV, E, 8, d. Procedures for OSC responders are located in the alternative facility.	No Change
199.	6.1.3 Emergency Operations Facility An Emergency Operations Facility (EOF) is located at the Pease International Tradeport in Portsmouth, New Hampshire. The EOF shown in Figure 6.6 serves as a base of operations for radiological assessment, overall emergency response organization management and recovery activities. The State of New Hampshire Incident Field Office is physically co-located with the EOF. This arrangement ensures close coordination with State emergency response staff.	[Annex – H.3] An Emergency Operations Facility (EOF) is located at the Pease International Tradeport in Portsmouth, New Hampshire. The State of New Hampshire Incident Field Office is physically co-located with the EOF. This arrangement ensures close coordination with State emergency response staff.	Non-RIE CEP describes EOF capability and limits command and control and non-delegable functions to the SM and SED. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP. Removed figure.

200.	The EOF is included in the Station emergency communications network, as described in Section 7.0, which links all emergency response facilities, monitoring and assistance teams dispatched from the EOF, and offsite agencies. The EOF has the capability to access and display Station parameters, including the Safety Parameter Display System, independent of both the TSC and Control Room. Backup power to the EOF is available.	[Annex – H.3] The EOF is included in the Station emergency communications network, as described in Section F, which links all emergency response facilities, monitoring and assistance teams dispatched from the EOF, and offsite agencies. The EOF has the capability to access and display Station parameters, including the Safety Parameter Display System, independent of both the TSC and Control Room. Backup power to the EOF is available.	No added, removed or altered commitments or change of intent.  Editorial  Aligned Section with NUREG-0654 R2 element. No added, removed or altered commitments or change of intent.
201.	Radiological assessment, monitoring and evaluation, and protective action recommendation formulation are directed from the EOF. The EOF organization shown in Figure 8.4 is responsible for continuous evaluation and coordination of all Seabrook Station activities related to an emergency having, or potentially having, adverse radiological consequences. Copies of selected building prints and general building layouts are available via the LAN and on disk and can be printed out at the EOF. Emergency planning documents applicable to Seabrook Station, including area maps, emergency response procedures, State and local emergency plans are available in the EOF. The Seabrook Station updated UFSAR is available via the LAN. A backup disk version is maintained at the EOF.	[Annex – H.3] Radiological assessment, monitoring and evaluation, and protective action recommendation formulation are directed from the EOF. The EOF organization is responsible for continuous evaluation and coordination of all Seabrook Station activities related to an emergency having, or potentially having, adverse radiological consequences. Copies of selected building prints and general building layouts are available via the LAN and on disk and can be printed out at the EOF. Emergency planning documents applicable to Seabrook Station, including area maps, emergency response procedures, State and local emergency plans are available in the EOF. The Seabrook Station updated UFSAR is available via the LAN. A backup disk version is maintained at the EOF.	Removed figure. ERO defined in Section B of the common emergency plan.  No added, removed or altered commitments or change of intent.
202.	The EOF has sufficient assembly space and is designed to accommodate responding representatives from government and industry. The EOF serves as the base of operations for Station material control, coordination of industry support, and establishment of a long-term organization to recover from the accident conditions and results. The EOF can serve as a centralized meeting location for key representatives from offsite authorities and Station management. The EOF can also act as a focal point for the coordination and acquisition of company	[Annex – H.3] The EOF has sufficient assembly space and is designed to accommodate responding representatives from government and industry. The EOF serves as the base of operations for Station material control, coordination of industry support, and establishment of a long-term organization to recover from the accident conditions and results. The EOF can serve as a centralized meeting location for key representatives from offsite authorities and Station management. The EOF can also act as a focal point for the coordination and acquisition of company	No Change

	resources and liaison with the Seabrook Station Joint Owners, American Nuclear Insurers and Institute of Nuclear Power Operations (INPO).	resources and liaison with the Seabrook Station Joint Owners, American Nuclear Insurers and Institute of Nuclear Power Operations (INPO).	
203.	Emergency equipment maintained at the EOF includes gear necessary to assess radiological habitability. This consists of monitoring for direct radiation, and sampling for airborne radioparticulates and radioiodines. The EOF provides information needed by Federal, State and local authorities for implementation of offsite emergency plans.	[Annex – H.3] Emergency equipment maintained at the EOF includes gear necessary to assess radiological habitability. This consists of monitoring for direct radiation, and sampling for airborne radioparticulates and radioiodines. The EOF provides information needed by Federal, State and local authorities for implementation of offsite emergency plans.	No Change
204.	6.1.4 Support for Radiological Analysis of Environmental Samples The Environmental Analysts will be activated at an Alert, Site Area and General Emergency to provide radiological analysis of environmental samples in the EOF. The Environmental Analysts will respond to the EOF to utilize radio-analysis equipment maintained in the EOF to analyze silver zeolite cartridges and particulate filters used by field monitoring and environmental sampling teams to collect air samples in the field.	[CEP – I.7] NextEra field monitoring equipment has the capability to detect and measure airborne radioiodine concentrations as low as 1E-7 μCi/cc in the presence of noble gases. Air samples will be taken with portable air sampling equipped with a Silver Zeolite or equivalent cartridge and particulate filter. Interference from the presence of noble gas and background radiation is minimized by ensuring that monitoring teams move to areas of low background prior to analyzing the sample cartridge.  Air sample results can be estimated in the field through the use of portable monitors. The samples can be subsequently analyzed for greater precision by the laboratory facilities described in Element C.4.	Non-RIE  Environmental Analysts position eliminated. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
205.	More definitive analysis of environmental samples will be available from GEL Laboratories. GEL is capable of providing on a continuous basis a full spectrum of radio-analysis of environmental samples which includes identification of principal accident radio-nuclides and their evaluation against EPA dose guidelines for relocation and FDA derived intervention levels associated with consumption of contaminated foods.	[Annex – C.4] GEL Laboratories is capable of providing on a continuous basis a full spectrum of radio-analysis of environmental samples which includes identification of principal accident radio-nuclides and their evaluation against EPA dose guidelines for relocation and FDA derived intervention levels associated with consumption of contaminated foods.	Editorial  No added, removed or altered commitments or change of intent.
206.	6.1.5 Joint Information Center The Joint Information center (JIC) is co-located with the EOF in Portsmouth, New Hampshire. The center will be activated in order to provide a centralized location for holding joint utility, State, and Federal emergency news briefings. JIC support will also be	[CEP – H.5] A near-site JIC (outside the 10 mile EPZ) is established for each site. ERO staffing of the JIC is concurrent with other ERFs, although facility activation is coordinated with the joint offsite agencies and has no time requirement.	Non-RIE Updated to present the general process used by NextEra. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions,

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supplied by NextEra Corporate Communications, based out of Florida. The Corporate JIC Manager and Emergency Communications Team (ECT) will work together with the JIC personnel located at the EOF. The Corporate JIC team will provide support remotely or travel to the JIC, dependent on the severity of the emergency. The Corporate JIC Manager and the Emergency News Manager will coordinate activities at the JIC. Emergency information will be obtained from the EOF and disseminated to the news media at the JIC.

When activated the JIC functions as a physical location for interacting with the media and for coordination between NextEra, federal and ORO PIOs regarding communications information to the public and the media.

NextEra provides space and equipment at their corporate facility to provide coordination of public information response activities with site and corporate JIS/JIC personnel.

Site specific details of the JICs are described in the site annexes.

[Annex - H.5]

The Joint Information Center (JIC) is co-located with the EOF in Portsmouth, New Hampshire.

[CEP-G.2]

NextEra Corporate Communications and business unit personnel maintain programs and processes for the coordination and dissemination of information to the public and media using JIS concepts. Specifically. the process provides a structure and system for developing and delivering coordinated interagency messages; developing, recommending, and executing public information plans and strategies; advising decision makers concerning public affairs issues that could affect a response effort; and controlling rumors and inaccurate information that could undermine public confidence in the emergency response effort.

Physical locations for interacting with the media are maintained at the corporate headquarters and locally near each site. Specific site locations are described in the site annexes Element H.5.

functions/tasks, and response time commitments of the CEP.

This center will accommodate the media by providing

- 1. a media relations telephone service for news media to call for information;
- 2. a media briefing room with a public address system and graphics;
- 3. accommodations for video and audio equipment and media vans: and
- 4. station background information.

[CEP - H.5]

When activated the JIC functions as a physical location for interacting with the media and for coordination between NextEra, federal and ORO PIOs regarding communications information to the public and the media.

[CEP - G.5]

The news media will be provided materials to acquaint them with emergency planning effort at the **Editorial** 

No added, removed or altered commitments or change of intent.

208.	It is expected that State and Federal public information personnel will operate from the JIC. New Hampshire Homeland Security & Emergency Management (NHHSEM) and Massachusetts Emergency Management Agency (MEMA) operate a rumor control telephone service for their respective states. Rumor trends will be reported to the NHHSEM and MEMA representatives in the Joint Information Center where they can be addressed in joint news briefings.	NextEra specific site(s) annually.  Typical content includes site information, information concerning radiation, emergency planning, and points of contact for release of information to the media during an emergency.  [CEP – H.5]  When activated the JIC functions as a physical location for interacting with the media and for coordination between NextEra, federal and ORO PIOs regarding communications information to the public and the media.  [CEP – G.4]  NextEra personnel coordinate with ORO and federal PIOs via the JIS, or in a JIC when activated, to identify and address public inquiries and inaccurate information.  Public information personnel monitor media and public sources for misleading or erroneous information and to address inquiries. Rumors and misinformation are collected and provided to the appropriate individual or agency PIO. The PIOs assess and discuss the rumors and misinformation to coordinate responses.  ORO and federal PIOs address misinformation relating to offsite conditions, including protective action directives. NextEra spokespersons address misinformation regarding station/utility rumors. Rumors and incorrect information are addressed in media statements and at news conferences as appropriate.	Editorial State response is contained within the state plans. No added, removed or altered commitments or change of intent.
209.	6.1.6 Federal Radiological Monitoring and Assessment Center The Federal Radiological Monitoring and Assessment Center (FRMAC) will be established by the US Department of Energy (DOE) at a suitable facility in proximity to the EOF in response to a request from either State or Federal authorities. The DOE and Environmental Protection Agency (EPA) are prepared to deploy specialized resources and establish a base of operations for offsite radiological monitoring and assessment activities. Environmental data obtained	[CEP – A.1.a] 2. Federal Organizations Control, responsibility and interface of federal organizations is governed by the National Response Framework (NRF) and the Nuclear/Radiological Incident Annex to the NRF when they are called to respond to an event at a nuclear power plant. The NRC acts as the lead federal agency with regard to technical matters during a nuclear incident, including providing radiological assistance.	Editorial Removed information contained in the Nuclear/Radiological Incident Annex to the NRF. No added, removed or altered commitments or change of intent.

	by an array of technical experts operating out of this center will be used by governmental officials in determining the hazard associated with the incident and the appropriate protective actions. DOE is responsible for the coordination of FRMAC emergency activities as described in the National Response Framework, Nuclear/Radiological Incident Annex.		
210.	6.2 Assessment Capability The activation of this plan and the continual assessment of accident conditions require extensive monitoring and assessment capabilities. The essential monitoring systems needed to allow recognition of abnormal events by the Station operators was used in the accident classification methodology. This section briefly describes these monitoring systems as well as other assessment capabilities.	[CEP – H.7] Element: Onsite monitoring systems used to initiate emergency response measures in accordance with the emergency classification scheme, as well as those to be used for conducting assessment, are identified. Monitoring systems consist of geophysical phenomena monitors, including meteorological, hydrologic, and seismic instrumentation; radiation monitors and sampling equipment; plant process monitors; and fire, toxic gas, and combustion products detectors.  NextEra sites have installed instrumentation for seismic monitoring, radiation monitoring, hydrologic monitoring, meteorological monitoring, and fire/ toxic gas/combustion products detectors in accordance with site Current Licensing Basis (CLB) documents.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Previous general content aligned with planning standard element.
211.	6.2.1 Process Monitors Station process monitoring capability includes many process monitor indications provided from various sensors located throughout Station systems. Parameters monitored include pressure, temperature, flow, level and equipment operating status. These monitoring systems are described in the Seabrook Station UFSAR.	[Annex - H.7] 4. Process and Area Radiation Monitors Process Radiation Monitors (PRMs) measure radioactive noble gas, iodine, and particulate concentrations in gaseous effluent pathways and gross radioactivity in other gaseous and fluid streams, and are used for event recognition and declaration. Area Radiation Monitors (ARMs) measure in-plant dose rates and allow in-plant dose rate determinations to be made remotely. This information may be used to aid in the determination of plant area accessibility for the protective action function. Refer to Chapters 11 and 12 of the UFSARs for descriptions of the PRM and ARM systems.	Editorial Removed information contained in the UFSAR. No added, removed or altered commitments or change of intent.
212.	6.2.2 Radiation Data Management System The Radiation Data Management System (RDMS) provides operators with the ability to assess Station	<ul><li>[CEP – H.8]</li><li>4. Radiological Environmental Monitoring</li><li>Offsite programs and processes are developed within</li></ul>	Editorial Removed information contained in the UFSAR.

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radiological conditions during normal operations, as the Radiological Environmental Assessment Program No added, removed or altered well as radiological emergency conditions. The RDMS (REMP) as described in the Offsite Dose Calculation commitments or change of intent. is a microprocessor-based acquisition and display Manual (ODCM) at each site. The Radiological system. Field mounted detectors communicate Environmental Assessment Program includes: individually to their own microprocessor which in turn Fixed continuous air samplers communicates to two central processing units (CPU) • Routine sampling of water, vegetation, consumable on a redundant communication loop. The various products parameters monitored include general area radiation. • A dose monitoring network process radioactivity levels, airborne contamination The locations of the normal onsite and offsite levels, and effluent radioactivity levels. The quantity environmental monitoring stations are described in and diversity of the parameters monitored, along with the ODCM. Additional predetermined emergency the display capabilities of the RDMS, provide the offsite monitoring locations are contained in operator with sufficient warning of accident conditions procedures. as well as continual accident assessments. However. Site specific details of the radiological environmental the primary means of quantitatively evaluating system assessment program are provided in the site specific and plant radioactivity levels will be through a ODCMs. program of collecting physical samples and [CEP - H.7] subjecting these physical samples to laboratory 5. Portable Radiation Monitors analysis to identify specific isotopes and their relation Portable radiation monitoring equipment is available to the RDMS. A contingency capability has been for uses such as area monitoring, sampling, established to measure accident dose rates in the personnel surveys, and continued accident reactor coolant system and to correlate the dose assessment. rates to reactor coolant activity. This capability 6. Sampling Systems provides the operators with fuel defect information Liquid and gaseous sampling systems, consisting of that would be used to classify fuel damage events. normal sampling systems and panels located This contingency capability includes the ability to throughout the unit(s) at each site, are used for event collect an archive sample from either the reactor recognition and declaration. Refer to Chapter 9 of the coolant system or the containment sump for UFSARs for descriptions the sites sampling systems. laboratory analysis. Each of the RDMS monitors alarms in the Control **Editorial** 213. Room and Operational Support Center for a variety of Removed information contained in alarm conditions (e.g., alert level, high level, power the UFSAR. failure, etc.). This system is described in the No added, removed or altered Seabrook Station UFSAR. commitments or change of intent. Geophysical Phenomena Monitors 6.2.3 **Editorial** 214. **ICEP - H.71** Meteorological 1. Meteorological Monitoring Removed information contained in Seabrook Station maintains a 210-foot-high Each NextEra site has a permanent on site the UFSAR. meteorological tower located near the south edge of meteorological monitoring station for the acquisition No added, removed or altered Brown's River, as shown in Figure 4.3. The and recording of wind speed, wind direction, and commitments or change of intent. parameters monitored include wind speed and stability class for use in offsite dose projection. direction at 43 feet and 209 feet above ground level, Meteorological information is displayed in the Control

	and vertical temperature difference (delta-T) between 43 feet and 150 feet and between 43 feet and 209 feet. The meteorological data from the tower are scanned and recorded as 15-minute averages by the Main Plant Computer System (MPCS). These averages are available for on-demand display on MPCS terminals located in the Control Room, TSC, and EOF. A data logger located in the instrument building near the base of the tower serves as backup recording mechanism. (Protected: Ref. NRC IR 85-32(19))	Room, TSC, and EOF. Refer to Chapter 2 of the UFSARs for descriptions of the meteorological monitoring systems.	
215.	A freestanding 53' backup meteorological tower is located adjacent to the settling basin outlet structure. The meteorological data from the backup tower are scanned and recorded as 15-minute averages by an independent computer system. These averages for wind speed, wind direction and calculated equivalent delta temperature are available for on-demand display on MPCS terminals located in the Control Room, TSC and EOF. (Protected: Ref. NRC IR 85-32(20))	[CEP – H.10] Site meteorological information is available on workstations in the Control Room(s), TSC, EOF, and to remote dose assessors. ERDS provides the NRC with selected meteorological data points on a near real-time basis. Meteorological inputs for the sites' dose assessment model are provided by ERF plant parameter display systems that obtain data from the site meteorological towers. Input parameters include wind speed, wind direction and stability class	Editorial Removed information contained in the UFSAR. No added, removed or altered commitments or change of intent.
216.	Additional sources of meteorological information include various National Weather Service (NWS) Offices, and the PSNH Electrical System Control Center.	[CEP – H.8] 1. Meteorological Monitoring Weather forecasts and certain meteorological data is available from the National Weather Service.	Non-RIE Removed reference to PSNH who obtains information from NWS.
217.	A dispersion model, Raddose-V, produces plume transport and diffusion estimates for the plume exposure pathway Emergency Planning Zone. The model produces plume dimensions, position, and relative concentrations at several downwind locations. Using effluent release information and a finite cloud external gamma dose model, estimates of near real-time dose rates will also be available. The model has the graphics capability of drawing plume position over a background map of the site. More information on these calculation techniques is given in Section 10.1.1 of this plan.	[CEP – I.1.b]  NextEra uses site specific versions of the Unified RASCAL Interface (URI) off-site dose projection computer model. The underlying dose assessment model in URI is the NRC RASCAL 4 model, based on the methods and equations documented in NUREG-1940.  The URI model provides off-site radiological dose and dose rate estimates based on near real time or hypothetical inputs. Projected dose is based on EPA-400-R92-001 dose conversion factors and provided as; (1) the total effective dose equivalent, or TEDE (the sum of the effective dose equivalent from immersion, 4 days of ground deposition, and the committed effective dose equivalent from inhalation),	Non-RIE Replaced Raddose with URI which is a verified dose projection model used throughout the industry and NRC. No added, removed or altered commitments or change of intent.

218.	2. Seismic Seabrook Station has installed seismic monitoring equipment with alarms indicated in the Control Room. The equipment consists of Triaxial Time History Accelerographs capable of measuring and permanently recording the absolute acceleration versus time for both horizontal and vertical motion. The Control Room alarms will indicate the following: a. Seismic event in progress; b. Seismic monitor trouble; and/or c. Seismic monitor OBE exceedance.	and (2) the committed dose equivalent to the thyroid (CDE thyroid).  URI dose projection results are given for various locations from the site boundary to 10 miles. URI is capable of providing dose assessment results for multiple release points from the site.  URI dose projection results and field monitoring readings are used in assessing radiological EALs and PARs.  [CEP – H.7]  3. Seismic Monitoring Each NextEra site has a seismic monitoring system that supports the acquisition of data used for event recognition and declaration. Refer to Chapter 3 of the UFSARs for descriptions of the seismic monitoring system.  [CEP – H.8]  2. Seismic Monitoring Seismic information from offsite sources can be obtained from the National Earthquake Information Center. The USGS is the contact agency to obtain information about a seismic event.	Editorial Removed information contained in the UFSAR. No added, removed or altered commitments or change of intent.
	3. Hydrologic Seismic Category I structures that house safety- related equipment have been designed to withstand a depth of still water on the Station grade (+20.6 ft. MSL) of 0.6 feet. Access openings in exterior walls that are below the design flood level consist of a railroad door in Unit 1 Fuel Storage Building and man doors in other structures. Flood protection has been provided by means of water-tight doors or curbs around the door openings. In the case of the Fuel Storage Building, curbs have been constructed around vulnerable equipment. All below-grade structures are waterproofed on the exterior face, and sumps have been installed in all buildings. Because of the general design, it was not necessary to install hydrologic monitors, nor will it be necessary to bring the reactor to a cold shutdown for the most severe flood anticipated for the Station.  6.2.4 Fire Detection Systems	[CEP – H.7]  2. Hydrologic Monitoring Each NextEra site has hydrological monitors that support the acquisition of data used for event recognition and declaration. Refer to Chapter 2 of the UFSARs for descriptions of the hydrologic monitoring systems.  [CEP – H.8]  3. Hydrologic Monitoring Hydrologic information is available from the National Weather Service.	Editorial Removed information contained in the UFSAR. No added, removed or altered commitments or change of intent.

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7. Fire Detection Systems Seabrook Station maintains an extensive fire Removed information contained in detection network which utilizes a combination of The fire detection system, consisting primarily of the UFSAR and Fire Hazard smoke detectors, thermal detectors and rate-of-rise fire/smoke detectors, control panel units, and Analysis. detectors as means of providing Station operators annunciator panels, are used for event recognition No added, removed or altered with complete fire status information. The fire and declaration. The fire detection equipment, commitments or change of intent. protection system is comprised of the following basic alarms, and suppression equipment are described in systems: detail in UFSAR Section 9.5 and in the sites' Fire A pumped water system providing a complete Hazard Analysis Report. underground looped station fire main with hydrants, hose houses and hose carrier for yard and building exterior protection, and internal sprinklers, hose stations and deluge systems for specific building applications. 2. Portable halon extinguishers in the Control Room complex, and all battery rooms. 3. Portable C02 fire extinguishers for use in relay room and switchgear areas. 4. Portable C02 and dry chemical fire extinguishers located throughout the Station for immediate use on small fires. 5. Fire pump house ventilation system. 6. Fire pump house and fire tank heating system. Standpipes with hose stations in the containment, control building, primary auxiliary building, fuel storage building, waste processing building and equipment vaults. 6.2.5 Facilities and Equipment for Offsite Non-RIE 221. Monitoring Removed information contained in In addition to offsite monitoring equipment and maps the ODCM and RP procedures. at the EOF as described in Section 6.1.3. Seabrook No added, removed or altered Station conducts an offsite radiological environmental commitments or change of intent. surveillance program. This program has been established for the site and surrounding area to monitor the environment under normal and accident conditions. Details of the requirements of this program are contained in the Station Offsite Dose Calculation Manual (ODCM). The EOF is equipped with a gamma spectroscopy [CEP - H.13] Non-RIE system with High Purity Germanium detector and The site radiological laboratory is the primary location Aligned Section with NUREG-0654 data processing computer. GEL Laboratories is R2 element requirements. for receipt of field monitoring team samples. The EOF available on a continuous 24 hour, seven days a RP Coordinator is responsible for direction and The station's main chemistry lab is week basis to provide a full spectrum of radiocoordination of field monitoring sample analyses, and the primary location equipped for

	analytical measurements on environmental sample media.	for assessing the radiological data obtained from the Field Monitoring Teams.  Sampling and analysis equipment are available (see Element C.4) for quantitative activity determination of liquid and air samples, and qualitative activity determination of terrestrial samples.  [Annex – C.4]  The station's main chemistry lab is the primary location equipped for chemical and radiological analysis.  Additionally, GEL Laboratories, Charleston, South Carolina, is available on a continuous 24 hour, seven days a week basis to provide a full spectrum of radio-analytical measurements on environmental sample media.  GEL Laboratories is capable of providing on a continuous basis a full spectrum of radio-analysis of environmental samples which includes identification of principal accident radio-nuclides and their evaluation against EPA dose guidelines for relocation and FDA derived intervention levels associated with consumption of contaminated foods.	chemical and radiological analysis.
223.	If mobilized, additional offsite monitoring and analysis capability will be provided by Federal agencies in accordance with the National Response Framework, Nuclear/Radiological Incident Annex, as discussed in Section 6.1.6. This additional capability would be integrated with the efforts underway in a coordinated manner.	[CEP – A.1.a] 2. Federal Organizations Control, responsibility and interface of federal organizations is governed by the National Response Framework (NRF) and the Nuclear/Radiological Incident Annex to the NRF when they are called to respond to an event at a nuclear power plant. The NRC acts as the lead federal agency with regard to technical matters during a nuclear incident, including providing radiological assistance.	Editorial Removed information contained in the Nuclear/Radiological Incident Annex to the NRF. No added, removed or altered commitments or change of intent.
224.	Figure 6.1 Location of Emergency Operation Centers Around the Seabrook Station Site	. 5	Editorial Removed figure. No added, removed or altered
225.	Figure 6.2 Relative Location of Technical Support within the 75' Elevation Level of the Control Building		commitments or change of intent.  Editorial  Removed figure.  No added, removed or altered commitments or change of intent.

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226.	Figure 6.5 Operational Support Center Layout		Editorial
			Removed figure.
			No added, removed or altered commitments or change of intent.
227.	Figure 6.6 EOF Layout		Editorial
	,		Removed figure.
			No added, removed or altered
			commitments or change of intent.
	Section 7.0, Communications		5
228.	Seabrook Station has established an emergency communications network for notifying and coordinating activities with offsite and onsite emergency response organizations. A summary of the communication network is presented below.	[Annex – F.1.a] Seabrook Station has established an emergency communications network for notifying and coordinating activities with offsite and onsite emergency response organizations. A summary of the communication network is presented below.	No Change
229.	The Nuclear Alert System (NAS), originating in the Control Room, and comprised of leased telephone lines, is used to notify the New Hampshire State Police (NHSP) Communications Center Dispatcher and Massachusetts Emergency Management Agency (see Figure 7.1) (MEMA) 24-hour Dispatcher of an emergency.  The NHSP and MEMA dispatchers will notify the Director, New Hampshire Homeland Security & Emergency Management and Director, MEMA, respectively. The Directors will notify their respective Governors. In addition to the Control Room and offsite warning points, the NAS has been installed in the two states' Emergency Operations Centers (EOCs), the MA Region I EOC in Tewksbury, the NH Rockingham County warning point in Brentwood, and the Emergency Operations Facility (EOF). The system can serve as a back-up communication system for coordination between the locations as shown on Figure 7.2. Backup to this system is a radio system.  Provisions are made for backup power to the Nuclear Alert System.  This system is manned on a 24-hour basis on both ends - the Station and the state offsite warning points.	[CEP – F.1.a] Each site maintains communications systems that are designed to facilitate normal and emergency communication. Refer to Chapter 9 of the UFSARs for descriptions of the primary site communications systems.  Provisions exist for continuous capability of communications with OROs and the NRC. Systems available for internal and external communications include:  Telephone Systems Public Address System Radio Communications Cellular Telephones Satellite Telephones Local and Wide Area Networks Data Systems Cellular and satellite telephones provide communications capability should the main telephone systems lose power. Site specific communications system beyond the above are described in the site annexes. [Annex - E.1] CORO Notification	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Notification process and communication with ORO described in common emergency plan and site annex Sections E and F. State response is contained within the state plans.

The following state 24/7 warning points are notified of The system is tested monthly between the states and the Station. a declared emergency at Seabrook Station: • New Hampshire State Police (NHSP) **Communications Center Dispatcher**  Massachusetts Emergency Management Agency (MEMA) 24-hour Dispatcher [Annex - F.1.a] **Nuclear Alert System** The Nuclear Alert System (NAS), originating in the Control Room, and comprised of leased telephone lines, is used to notify the state 24/7 warning points of a declared emergency at Seabrook Station. The Nuclear Alert System (NAS) has been installed in the two states' Emergency Operations Centers (EOCs), the MA Region I EOC in Tewksbury, the NH Rockingham County warning point in Brentwood, and the Emergency Operations Facility (EOF). Provisions are made for backup power to the Nuclear Alert System. **NRC Communications Channels** 230. [CEP - E.1] **Editorial** A designated FTS-2001 telephone is installed in the 3. NRC Event Notification Detailed information on the Control Room as the Emergency Notification System NextEra will notify the NRC using ENS as soon as descriptions of the primary site (ENS) line. This line is used to provide initial communications systems is in the possible after notification of the OROs, and not later emergency notifications to the Nuclear Regulatory UFSAR. than 60 minutes after event declaration. Commission Headquarters Operations Center in An accelerated call to the NRC will be made Rockville, MD. The line is staffed on an around-theimmediately after notification of local law enforcement clock basis by both organizations. The ENS line is agencies (LLEAs), or within about 15 minutes of the also available in the EOF and the Alternative TSC. recognition of the security-based threat (discovery of Designated FTS-2001 telephones are installed in the an imminent threat or attack against the site), to Emergency Operations Facility and the Technical ensure the NRC is notified of safeguards events. The Support Center to support the Health Physics information provided in the accelerated NRC Network (HPN). These telephones will be used to notification will be limited to the following: provide radiological and protective action-related Site name. information to the NRC. ECL if determined prior to the accelerated Additional FTS-2001 and commercial line capabilities notification. have been established in each response center for Nature of the threat and the attack status. use by NRC response team members. [CEP - Table F-1] Communication System **Testing Requirement** NRC FTS (ENS) Network Monthly (b) (b) NRC ENS in the Control Room is Frequent Use.

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		TSC and EOF require monthly testing	
231.	The Emergency Response Data System (ERDS) is installed as a user-selected function on the Main Plant Computer System (MPCS). ERDS may be activated from selected MPCS terminals located in the Control Room and TSC. ERDS will be activated within 1 hour of the declaration of an Alert or higher emergency classification. ERDS is tested on a quarterly basis.	[CEP – C.5.a] When an emergency occurs, ERO personnel will ensure ERDS operation as soon as possible but not later than one hour after an alert or higher emergency classification level is declared, in accordance with 10 CFR 50.72(a)(4). [CEP -Table F-1] Communication System Testing Requirement ERDS Verify Transmission Quarterly	Non-RIE  ERDS will be continuously on at SBK.  No added, removed or altered commitments or change of intent.
232.	7.3 Telephone System The Telephone System is used as a means of communications for notification and coordination with onsite and offsite organizations/teams. The telephone system is interconnected with the public address system and leased communications systems. If power is lost to the Station PBX, certain extensions located in the Control Room, TSC, OSC and Guard Island will be automatically connected to the public telephone exchange network directly. Power to the PBX is backed up by uninterruptible power supplies and the diesel generator. The telephone system can also access the UHF Trunked Radio System via a telephone interconnect.	[Annex – F.1.a] Telephone System The Telephone System is used as a means of communications for notification and coordination with onsite and offsite organizations/teams. The telephone system is interconnected with the public address system and leased communications systems. If power is lost to the Station PBX, certain extensions located in the Control Room, TSC, OSC and Guard Island will be automatically connected to the public telephone exchange network directly. Power to the PBX is backed up by uninterruptible power supplies and the diesel generator. The telephone system can also access the UHF Trunked Radio System via a telephone interconnect.	No Change
233.	7.4 Commercial Pager Service Seabrook Station utilizes a commercially available paging service to notify Primary Responders, Subject- to-Call Responders and other Secondary Responders. These digital display pagers are activated by telephone or by computer software. Pagers may be activated collectively by a group call number or individually. This pager system uses multiple transmitter sites within a twenty-five-mile radius of Seabrook Station.	[Annex – F.1.a] Commercial Pager Service Seabrook Station utilizes a commercially available paging service to notify the ERO. These digital display pagers are activated by telephone or by computer software. Pagers may be activated collectively by a group call number or individually. This pager system uses multiple transmitter sites within a twenty-five-mile radius of Seabrook Station.	Editorial  No added, removed or altered commitments or change of intent.
234.	7.5 Station Radio System Figure 7.3 provides a summary of the Offsite Monitoring Team Radio Communications Network described in Section 7.5.1. Figure 7.5 provides a summary of the existing Seabrook Station UHF station radio communications network described in	[CEP – F.1.a] Each site maintains communications systems that are designed to facilitate normal and emergency communication. Refer to Chapter 9 of the UFSARs for descriptions of the primary site communications	Non-RIE Detailed information on the descriptions of the primary site communications systems is in the UFSAR.

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235.	7.5.1 Offsite Monitoring Team Radio Network The VHF radio system previously used as a primary means of two-way communications with the radiological survey teams has been retired. A UHF network, using radio frequencies supporting the Seabrook Public Alert Notification System (PANS), replaces it. This network consists of the following: 1. A tone remote, control base, and antenna assigned to the Emergency Operations Facility (EOF) which can transmit to radiological survey via five distinct channels. 2. Two mobile radios installed in dedicated radiological survey vehicles and a third portable mobile which can be installed in any vehicle. 3. Six portable radios available to support State radiological survey teams, as needed All components of the EOF controls are backed up by emergency power. All system repeaters are backed up by emergency power.	systems.  Provisions exist for continuous capability of communications with OROs and the NRC. Systems available for internal and external communications include:  Telephone Systems Public Address System Radio Communications Cellular Telephones Satellite Telephones Local and Wide Area Networks Data Systems Cellular and satellite telephones provide communications capability should the main telephone systems lose power.  [CEP – H.3] Each EOF provides communications to the Control Room, TSC, field monitoring teams, NRC, and OROs. [Annex – F.1.a] Offsite Monitoring Team Radio Network The Offsite Monitoring Team Radio Network is a UHF network, using radio frequencies supporting the Seabrook Public Alert Notification System (PANS). This network consists of the following:  A tone remote, control base, and antenna assigned to the Emergency Operations Facility (EOF) which can transmit to radiological survey via five distinct channels.  Mobile radios are installed in dedicated radiological survey vehicles and portable mobiles are available which can be installed in any vehicle.  Portable radios are available to support State radiological survey teams, as needed. All components of the EOF controls are backed up by emergency power. All system repeaters are backed up by emergency power.	Non-RIE  Detailed information on the descriptions of the UHF system is in the UFSAR.  Detailed information on the descriptions of PANS is in the alert and notification design report.  Radio quantity removed contained in emergency preparedness facility inventory document (procedure level content).
236.	To support rapid deployment of onsite radiological survey teams within or near the site boundary, remote control consoles in the Control Room, Technical Support Center, and Operational Support Center can		Non-RIE Detailed information on the descriptions of the UHF system is in the UFSAR.

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237.	available push-to-talk mobile communications network designed to provide two-way communications with State and utility radiological survey teams.	[Annex – F.1.a]  Offsite Monitoring Team Radio Network Seabrook Station also maintains a commercially available push-to-talk mobile communications network designed to provide two-way communications with State and utility radiological survey teams.	Radio locations removed contained in emergency preparedness facility inventory document (procedure level content).  No Change
238.	A UHF trunked radio repeater system is used for onsite two-way communications by station Operations, Maintenance, Fire Fighters, Health Physics, and Security personnel. Trunking is the process where a trunking controller automatically selects the channel/repeater when a user keys a portable radio or base station. The trunking controller automatically selects the communication path rather than the user having to manually switch channels to find a clear channel. Should a trunked repeater fail, the trunking controller will allow the user to continue communication almost without knowledge of the repeater failure and without termination of the communication. Should the trunking controller fail, the system reverts to operation similar to a conventional repeater system where users are assigned a specific repeater. For a failure of all fixed radio equipment (trunking controller, repeaters, and RF mixing rack), communications can be maintained by manually switching the control stations and portables to the TALKAROUND (direct) mode. This mode has reduced coverage since the repeaters are not in service. Trunking greatly improves the reliability of the entire system and allows individual repeaters to handle traffic from any user group if other repeaters are in use or inoperable. The programmable features of the system allow the creation of various user talk groups and priority levels.	[CEP – F.1.a] Each site maintains communications systems that are designed to facilitate normal and emergency communication. Refer to Chapter 9 of the UFSARs for descriptions of the primary site communications systems.  Provisions exist for continuous capability of communications with OROs and the NRC. Systems available for internal and external communications include:  Telephone Systems Public Address System Radio Communications Cellular Telephones Satellite Telephones Local and Wide Area Networks Data Systems Cellular and satellite telephones provide communications capability should the main telephone systems lose power.	Non-RIE Detailed information on the descriptions of the primary site communications systems is in the UFSAR.

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239.	A conventional radio repeater is provided as a telephone system interconnect. This allows the radio system to access the telephone system, or vice versa. This capability exists only for those portable radios that are programmed for this feature. Another conventional repeater is provided as a paging system interconnect to activate onsite pagers.		Non-RIE Detailed information on the descriptions of the primary site communications systems is in the UFSAR.
240.	The radio system equipment is powered from the nonsafety power system. Backup power for the trunking controller, repeaters, and RF mixing rack is provided by an emergency diesel generator and by a dedicated battery rated for two hours. Other fixed radio equipment such as control stations and control consoles are provided with backup power from an emergency diesel generator backed or uninterruptible power supply (UPS) backed sources, or a dedicated battery rated for two hours. Control consoles located at the Health Physics (HP) Alternate Checkpoint are not provided with backup power.		Non-RIE  Detailed information on the descriptions of the primary site communications systems is in the UFSAR.
241.	Portable radios can operate independently of all other systems. They are backed up by their own batteries for continued operation in case of loss of all AC power.		Non-RIE  Detailed information on the descriptions of the primary site communications systems is in \the UFSAR.
242.	Remote control consoles are located at the main control room, the Technical Support Center (TSC), the Health Physics/Operational Support Center (HP/OSC), and the HP Alternate Checkpoint.		Non-RIE  Detailed information on the descriptions of the primary site communications systems is in the UFSAR.
243.	For a description of the system features provided for Security, refer to the Security Plan.		Non-RIE Removed redundant information contained in the Security Plan.
244.	7.6 Station Paging System A plant paging system is used for alerting in-plant personnel of emergencies. A central control panel is located in the Control Room. The paging system is accessed through dedicated paging system handsets which are located throughout the plant including the Control Room, Technical Support Center, Operational Support Center, and Security Guard House.	[Annex – F.1.a]  Station Paging System  A plant paging system is used for alerting in-plant personnel of emergencies. A central control panel is located in the Control Room. The paging system is accessed through dedicated paging system-handsets which are located throughout the plant including the Control Room, Technical Support Center, Operations Support Center, and Security Guard House.	Editorial Changed title and facility name No added, removed or altered commitments or change of intent.

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245.	The system consists of four channels, and is utilized as a page/talk system under normal operations. During emergency situations, the system can be used for (1) alerting Station personnel; (2) coordinating activities between onsite response teams and the Technical Support Center; (3) calling missing persons that may be in the Station; (4) coordinating activities between Control Room and Technical Support Center; and (5) communicating between Station centers.	[Annex – F.1.a] The system consists of four channels, and is utilized as a page/talk system under normal operations. During emergency situations, the system can be used for (1) alerting Station personnel; (2) coordinating activities between onsite response teams and the Technical Support Center; (3) calling missing persons that may be in the Station; (4) coordinating activities between Control Room and Technical Support Center; and (5) communicating between Station centers.	No Change
246.	A multi-tone generator is associated with the paging system. This generator produces the various alarms designated to alert Station personnel of emergency situations. Alerting is ensured by the location of the page system speakers. In high background noise areas, beacon lights or similar devices supplement the speakers. The alerting signal is manually initiated from the Control Room by keying the appropriate alarm station. The evacuation alarm takes priority over all other transmissions.	[Annex – F.1.a] A multi-tone generator is associated with the paging system. This generator produces the various alarms designated to alert Station personnel of emergency situations. Alerting is ensured by the location of the page system speakers. In high background noise areas, beacon lights or similar devices supplement the speakers. The alerting signal is manually initiated from the Control Room by keying the appropriate alarm station. The evacuation alarm takes priority over all other transmissions.	No Change
247.	Power to the paging system is provided by uninterruptible power supplies, independent from the power supply for the telephone system. The paging system is used daily and the alerting alarm is tested weekly.	[Annex – F.1.a]  Power to the paging system is provided by uninterruptible power supplies, independent from the power supply for the telephone system. The paging system is used daily and the alerting alarm is tested weekly.	No Change
248.	7.7 Sound-Powered Telephone System The Station has been equipped with a multiple loop sound-powered telephone system. Jack locations have been provided near many major pieces of equipment and on control panels, instrument racks, motor control centers, unit substations and switchgear. Switching panels are provided in the Control Room to enable the loops to be connected together. A supply of sound powered telephone handsets and cables are available in the Control Room emergency supply room. Since no external power is necessary for operation, the system is available during an emergency; however, its greatest	[Annex – F.1.a] Sound-Powered Telephone System The Station has been equipped with a multiple loop sound-powered telephone system. Jack locations have been provided near many major pieces of equipment and on control panels, instrument racks, motor control centers, unit substations and switchgear. Switching panels are provided in the Control Room to enable the loops to be connected together. A supply of sound powered telephone handsets and cables are available in the Control Room emergency supply room. Since no external power is necessary for operation, the system is	No Change

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	application would occur during a recovery phase.	available during an emergency; however, its greatest	1
	application would occur during a recovery phase.	application would occur during a recovery phase.	
249.	Figure 7.1 Emergency Notification	application would occur during a receivery pridee.	Non-RIE
			Removed figure. Notification
			process described in Section E of
			common emergency plan and site annex.
250.	Figure 7.2 Coordination Channels with States		Non-RIE
			Removed figure. Coordination with
			states shown in Figure B.4 of the
			common emergency plan. Communications described in
			Section F of common emergency
			plan and site annex.
251.	Figure 7.3 Offsite Monitoring Team Radio		Non-RIE
	Communications		Removed figure. Communications
			described in Section F of common emergency plan and site annex.
			Detailed information on the
			descriptions of the primary site
			communications systems is in the UFSAR.
252.	Figure 7.4 Telephone Communication Systems		Non-RIE
252.	Overview		Removed figure. Communications
			described in Section F of common
			emergency plan and site annex.
253.	Figure 7.5 UHF Radio Communication Systems		Non-RIE
	Overview		Removed figure. Communications described in Section F of common
			emergency plan and site annex.
			Detailed information on the
			descriptions of the primary site
			communications systems is in the UFSAR.
	Section 8.0, Organization		0.0,44
254.	8.1 Introduction	[CEP – B.1.a]	Non-RIE
	An Emergency Response Organization (ERO) has	A description of the normal site operating	ERO function and task hierarchy
	been established to respond to radiological emergencies at Seabrook Station. This organization	organization is contained in each sites' UFSAR	updated consistent with current NRC and industry guidance.
	includes Seabrook Station personnel, local services	(typically Chapter 13). The requirements for on-shift operations staff,	Refer to Analysis #1 and Analysis
		Time requirements for on-still operations stall,	Incier to Arialysis #1 and Arialysis

support, and private organization support. The structure of the emergency response organization will vary depending on the time of day, the severity of the incident, and the emergency classification. In the initial phases of an accident, an on-shift ERO (See Figure 8.1) consisting of personnel from the normal Station organization will be responsible for event classification and completion of emergency actions. In the following phases of emergency response, the Augmented ERO for either the Unusual Event (See Figure 8.2) or Alert, Site Area staffing analysis reports are maintained as part of the Emergency, and General Emergency (See Figure 8.3) will be activated with the capability of continuous. 24-hour-per-day operations for a protracted period. Figure 8.15 provides a comparison of the NUREG-0654 Table B-1 emergency response staffing requirements with the on-shift ERO.

security force staff, and fire brigade/first aid staff are controlled by Technical Specifications and other licensing and administrative documents. Positions from these departments are described in the emergency plan only when assigned an emergency preparedness function that is performed during an emergency.

Site specific on-shift staffing analysis reports are developed in accordance with 10 CFR 50 Appendix E.IV.A.9 and NEI 10-05. The site specific on-shift site emergency plans and are referenced in the site annexes.

The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):

[CEP - B.3]

The ERO is composed of on-shift personnel located at the site at all times, and augmenting personnel (responding to their assigned emergency facility or remotely).

Refer to Table B-1 for the on-shift and augmenting ERO staffing plan.

#2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

Removed figure. ERO defined in Section B of the common emergency plan.

No added, removed or altered commitments or change of intent

**Emergency Response Organization** 255. 8.2 The ERO structure which would be activated to respond to an incident at Seabrook Station is provided in Figures 8.1 through 8.6 and Figure 8.9. Appendix A describes the positions listed on these figures along with activation level, response location and responsibilities.

> Appendix A also correlates the normal Station title and/or types of background and responsibilities of assigned personnel to the emergency title for each position.

[CEP – Planning Standard B]

**Emergency Response Organization** On-shift facility licensee responsibilities for emergency response are unambiguously defined. adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available, and the interfaces among various onsite response activities and offsite support and response activities are specified.

## Non-RIE

The CEP and Annexes are formatted in a 50.47(b) outline. Previous general content aligned with planning standard.

Appendix A removed:

Table 1 - ERO prerequisites and background contained in training program description.

Table 2 - Staffing assignments and responsibilities documented in Section B of common emergency plan.

Removed figure. ERO defined in Section B of the common emergency plan.

No added, removed or altered

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			commitments or change of intent.
256.	8.2.1 On-Shift Emergency Response Organization The Shift Manager has the authority and responsibility to classify abnormal conditions in accordance with the emergency classification system. The classification and declaration of an emergency initiates the activation of the on-shift ERO (See Figure 8.1). Once an emergency is declared, the Shift Manager assumes the position of Short Term Emergency Director (STED). If available, the Unit Supervisor may assume the duties of the STED in the absence of the Shift Manager.	[CEP – B.2] The Shift Manager is the individual who is on-shift at all times and assumes the role of Emergency Director upon emergency declaration. As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures.	Non-RIE ERO function and task hierarchy updated consistent with current NRC and industry guidance. The Shift Classification Advisor will assume the duties of the STED in the absence of the Shift Manager. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP. Relief of sick or incapacitated
			watch-standers is governed by technical specifications. Removed figure. ERO defined in Section B of the common emergency plan. No added, removed or altered
257.	The Work Control Supervisor is a senior licensed individual assigned to each shift and is available to assist the STED with emergency plan implementation. Such assistance will be at the discretion of and as directed by the STED. All information provided to offsite authorities by the Work Control Supervisor will first receive review and approval by the STED.		commitments or change of intent.  Non-RIE  Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
258.	Additional on-shift personnel assume emergency duties in the On-Shift Emergency Response Organization shown on Figure 8.1. Actions include assistance in initial emergency classification or reclassification, notification of State and NRC personnel, recommendation of offsite protective actions, and operational activities to achieve and maintain Station safety.	[CEP – B.1.a] The on-shift ERO and minimum augmenting ERO is composed of the following positions, which are assigned responsibilities within the following functions (organized by facility):  1. Control Room (CR)  A. Shift Manager  Organizational Interface and Coordination  Command and Control  Facility/Group Management and Supervision  Contact and Use of External Support Services	Non-RIE ERO function and task hierarchy updated consistent with current NRC and industry guidance. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP. Removed figure. ERO defined in Section B of the common

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	T
Use of Medical, Fire and Law Enforcement Support	emergency plan.
NRC Notification and Communications	No added, removed or altered
• Event Classification	commitments or change of intent
• ERO Notification	
State and Local Event Notification	
ERF Communications	
Accident Detection and Assessment	
Effluent Release and Dose Assessment	
OSC Team Priorities, Dispatch and Control	
Site Assembly and Accountability	
Site Evacuation	
ERO Radiological Protection	
Offsite Protective Action Recommendations	
Emergency Exposure	
• First Aid	
Event Termination	
B. Radiation Protection Technician	
<ul> <li>Radiological Monitoring Activities</li> </ul>	
ERO Radiological Protection	
Emergency Exposure	
Contamination Control Measures	
C. Radiation Protection Qualified Individual (RPQI)	
<ul> <li>Radiological Monitoring Activities</li> </ul>	
ERO Radiological Protection	
Emergency Exposure	
Contamination Control Measures	
D. Security Shift Supervisor	
Organizational Interface and Coordination	
Use of Medical, Fire and Law Enforcement Support	
NRC Notification and Communications	
Site Assembly and Accountability	
Site Evacuation	
E. Shift Technical Advisor (STA)	
Note – Assigned as a collateral duty in accordance	
with Technical Specification.	
Accident Detection and Assessment	
Core Damage Assessment	
F. Shift Classification Advisor	
Note – Assigned as a collateral duty to an on-shift	

259.	The Seabrook Station On-Shift Staffing Analysis Report, developed in accordance with 10 CFR 50 Appendix E, Section IV, A, 9, shows that the on-shift ERO is not assigned responsibilities that would prevent the timely performance of its assigned functions as specified in the emergency plan. SSREP Figure 8.1 depicts on-shift ERO staffing.	SRO other than the Shift Manager.  • Event Classification  • State and Local Event Notification  • Accident Detection and Assessment  • Offsite Protective Action Recommendations G. Shift Communicator  Note – Assigned as a collateral duty to an on-shift position other than the RPT or RPQI.  • NRC Notification and Communications  • ERO Notification  • State and Local Event Notification  • OSC Team Priorities, Dispatch and Control H. Shift Dose Assessor  Note – Assigned as a collateral duty to any on-shift position.  • Effluent Release and Dose Assessment  [CEP – B.1.a]  Site specific on-shift staffing analysis reports are developed in accordance with 10 CFR 50 Appendix E.IV.A.9 and NEI 10-05. The site specific on-shift staffing analysis reports are maintained as part of the site emergency plans and are referenced in the site annexes.  [Annex - B.1.a]  The Seabrook Station on-shift staffing analysis report has been developed in accordance with 10 CFR 50 Appendix E.IV.A.9 and NEI 10-05.  Refer to EP-SBK-142, SBK OnShift Staffing Analysis.	Editorial The CEP and Annexes are formatted in a 50.47(b) outline. Removed figure. ERO defined in Section B of the common emergency plan No added, removed or altered commitments or change of intent.
260.	8.2.2 Augmented Emergency Response Organization Following classification of an emergency, the On-Shift ERO will evolve to an Augmented ERO. The composition of the Augmented ERO depends upon the emergency classification level.	[CEP – D.3]  NextEra maintains procedures that include immediate actions to be taken that are consistent with any declared ECL.  Emergency Operating Procedures provide instructions to Control Room personnel to assist in mitigating the consequences of a broad range of accidents and multiple equipment failures. These procedures are based on guidelines developed by the owners' groups.  Emergency plan implementing procedures provide instructions to ERO personnel for response activities	Editorial  No added, removed or altered commitments or change of intent.

		primarily associated with assessment, classification,	
		notification and protective actions. Other functions	
		such as communications, termination and recovery	
		are also addressed.	
		A summary of response actions taken at each ECL is	
		as follows:	
261.	Unusual Event Augmented Emergency	[CEP - D.3]	Potential RIE 6-1
	Response Organization During an Unusual Event, a limited number of ERO	1. Unusual Event (UE)	Refer to assessment Section 3.1 for
	members, shown in Figure 8.2, are notified to assist	• Initial and follow-up event notification to the OROs	the disposition of this item.
	the on-shift staff with the emergency response. These	and NRC.	
	individuals are referred to as Primary Responders.	Notification of ERO personnel. This is an information only notification and does not require	
	The STED will transfer overall management	activation of emergency facilities or response	
	responsibility to the arriving Site Emergency Director.	organizations. Any Emergency Response Facility	
	As part of this transfer, the Site Emergency Director	(ERF) may be activated at the discretion of the	
	will be fully briefed by the STED on the status of the	Emergency Director.	
	Station, accident mitigation and corrective actions taken, offsite notifications and the status of the ERO.		
262.	Upon assuming command, the Site Emergency	[CEP – E.1]	Potential RIE 6-1
	Director will notify appropriate ERO members of the	1. ERO Notification	Refer to assessment Section 3.1 for
	transfer. Independent of the arrival of the Site	The Emergency Director will direct or perform	the disposition of this item.
	Emergency Director, the Unusual Event Augmented	notification of the ERO for all emergency classification	and disposition of this item.
	ERO will carry out its responsibilities as outlined in	levels. ERO personnel report to their assigned	
	the appropriate position descriptions of Appendix A. These actions are directed towards termination of	emergency response facilities as directed. In the	
	emergency conditions, assessment of onsite	event of a security threat, personnel may be	
	radiological conditions, technical support,	instructed to respond to alternative facilities, or seek cover if on-site.	
	coordination of Station activities with offsite	CCP = B.2	
	authorities (State and Federal), and provision of	The Emergency Director ERO position has overall	
	medical and other requested assistance.	command and control of a declared emergency at a	
		NextEra site.	
		The Shift Manager is the individual who is on-shift at	
1		all times and assumes the role of Emergency Director	
		upon emergency declaration. As Emergency Director,	
		the Shift Manager has the authority and responsibility	
		to immediately and unilaterally initiate any emergency	
		actions, including providing protective action recommendations (PARs) to authorities responsible	
1		for implementing offsite emergency measures.,	
1		The Shift Manager maintains overall command and	
		control until relieved.	
	l .	· ·	

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## [CEP - B.2.a]

The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level.

Non-delegable responsibilities include the following:

- Event declaration
- ORO and NRC Notification
- · PARs for the general public
- Emergency Exposure (Dose limits and KI)

Approving departures from license conditions per 10 CFR 50.54(x) transition from the Shift Manager to the Site Emergency Director upon transfer of command and control.

[CEP - B.1.a]

2. Technical Support Center (TSC)

A. Site Emergency Director

- Organizational Interface and Coordination
- Federal Assistance
- Continuous Emergency Response Operations
- Command and Control
- Facility/Group Management and Supervision
- Contact and Use of External Support Services
- Integration of Offsite Agency Personnel in the ERF
- NRC Notification and Communications
- Event Classification
- · State and Local Event Notification
- ERF Communications
- Facility Activation
- Backup and Alternative Facilities
- Accident Detection and Assessment
- · OSC Team Priorities, Dispatch and Control
- Site Assembly and Accountability
- Site Evacuation
- ERO Radiological Protection
- Offsite Protective Action Recommendations
- Emergency Exposure
- Event Termination
- Recovery

263.	If the condition(s) that caused the Unusual Event	[CEP – B.2]	Potential RIE 6-1
200.	completely clears prior to the Control Room notifying the Primary Responders, the STED may determine which, if any, of the Primary Responders need to report to the site. If not, these individuals will complete their assigned tasks on the following business day.	The Emergency Director ERO position has overall command and control of a declared emergency at a NextEra site.  The Shift Manager is the individual who is on-shift at all times and assumes the role of Emergency Director upon emergency declaration. As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures.	Refer to assessment Section 3.1 for the disposition of this item.
264.	2. Alert, Site Area Emergency and General Emergency Augmented Emergency Response Organization Upon declaration of an Alert, Site Area Emergency, or General Emergency, there is a full augmentation of the On-Shift ERO. The fully augmented Alert, Site Area Emergency, General Emergency Augmented Emergency Response Organizations are shown on Figures 8.3 through 8.6 and Figure 8.9.	[CEP – D.3] 2.Alert • Augmentation of the shift ERO (refer to Element A.1.a) by activating the Technical Support Center, Operations Support Center and Emergency Operations Facility. 3. Site Area Emergency • Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed. 4. General Emergency • Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.	Editorial Removed figure. ERO defined in Section B of the common emergency plan. No added, removed or altered commitments or change of intent.
265.	The augmented emergency response organizations will carry out the responsibilities listed for the appropriate positions in Appendix A.		Non-RIE Appendix A removed: Table 1 - ERO prerequisites and background contained in training program description. Table 2 - Staffing assignments and responsibilities documented in Section B of common emergency plan.
266.	The Site Emergency Director will transfer command of the overall emergency response to the Response Manager. As part of this transfer, the Site Emergency Director will brief the Response Manager on Station status, accident mitigation, corrective actions taken, status of the ERO, and the protective action recommendations, if any, provided to offsite authorities.	CEP – B.2.a] Non-delegable responsibilities include the following: • Event declaration • ORO and NRC Notification • PARs for the general public • Emergency Exposure (Dose limits and KI) Approving departures from license conditions per 10	Non-RIE CEP limits command and control and non-delegable functions to the SM and SED. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions,

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	The Site Emergency Director will continue to direct all onsite response activities.	CFR 50.54(x) transition from the Shift Manager to the Site Emergency Director upon transfer of command and control.	functions/tasks, and response time commitments of the CEP.
267.	The Response Manager position will be assumed by a member of Seabrook Station senior management. This person has the authority, management ability and technical background to organize and manage response and recovery operations. The Response Manager is responsible for providing overall direction and guidance to the Site Emergency Director in the effort to return the Station to a safe condition.	[CEP - B.1.a] 4. Emergency Operations Facility (EOF) A. EOF Manager • Organizational Interface and Coordination • Continuous Emergency Response Operations • Facility/Group Management and Supervision • Contact and Use of External Support Services • Integration of Offsite Agency Personnel in the ERF • Dispatch and Control of Offsite EOC Liaisons • ERF Communications • Facility Activation • Facility Operation • Site Evacuation • Recovery	Non-RIE CEP limits command and control and non-delegable functions to the SM and SED. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
268.	For Alert, Site Area Emergency, and General Emergency declarations, the Response Manager will report to the EOF and this position will remain in effect until emergency conditions and subsequent recovery activities have been terminated.	[CEP – D.3] 2.Alert • Augmentation of the shift ERO (refer to Element A.1.a) by activating the Technical Support Center, Operations Support Center and Emergency Operations Facility. 3. Site Area Emergency • Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed. 4. General Emergency • Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.	Editorial The CEP and Annexes are formatted in a 50.47(b) outline. EOF Manager reports to the EOF which activates at the Alert/SAE/GE. No added, removed or altered commitments or change of intent.
269.	The remaining Station ERO staff will report to locations identified in Appendix A and shown in Figures 8.3 through 8.6 and Figure 8.9. This may involve the relocation of some ERO staff from Unusual Event response locations to Alert, Site Area Emergency, and General Emergency response locations.	[CEP – Table B.1]  Table B.1 provides listing of ERO by function [CEP – B.1.b]  The NextEra ERO includes remote response positions. Remote response positions are not required to physically manipulate plant equipment or take other physical actions at the site. Remote response positions are provided the resources to collaborate with ERO personnel in their assigned emergency facility. These resources provide;	Non-RIE The Common Emergency Plan (CEP) no longer differentiates by Primary, Subject to Call and Secondary responders. The CEP identifies minimum staff positions, non-minimum staff positions will be identified in the implementing procedures. Current ERO documented in Section B of common emergency

 the ability to communication audio/visually between plan. emergency facility and the remote responder. Refer to Analysis #1 and Analysis the ability to access procedures, information and #2 for a detailed comparison data. evaluation of the ERO positions. the ability to share screens/documents. functions/tasks, and response time ERO members responding remotely to an emergency commitments of the CEP. are capable of performing all functions and tasks Appendix A removed: assigned to their position, including support provided Table 1 - ERO prerequisites and to other ERO members, as described in the background contained in training emergency plan and implementing procedures. program description These positions support the on-shift staff prior to Table 2 - Staffing assignments and activation of the TSC and EOF. responsibilities documented in 1. Remote Responders Assigned to the TSC (refer to Section B of common emergency Section B.1.a.2) plan. The Reactor Engineer, Electrical/I&C Engineer, and Mechanical Engineer ERO minimum staff positions are remote responders assigned to the TSC. NextEra provides a corporate facility that provides the equivalent resource capability as a backup for the remote ERO engineering positions. 2. Remote Responders Assigned to the EOF (refer to Section B.1.a.4) The Remote Dose Assessor ERO minimum staff position is assigned to the EOF. NextEra provides a corporate facility that provides the equivalent resource capability as a backup for the Remote Dose Assessor position. Additionally, the Shift Dose Assessor from another NextEra site are capable of supporting the affected site as a backup to the Remote Dose Assessor position. **Emergency Public Information Organization** [CEP - Planning Standard G] Non-RIE **270.** 8.3 The Emergency Public Information Organization is The CEP and Annexes are Emergency planning information is made available to responsible for providing factual and timely formatted in a 50.47(b) outline. the public on a periodic basis and includes information to the public regarding emergency Previous general content aligned information on how they will be notified and what conditions at Seabrook Station. with planning standard. actions they may be asked to take (e.g., listening to a local broadcast station, remaining indoors, etc.). Information will also be provided to the news media to include principal points of contact to receive information (including the physical location(s)) and information about the coordinated dissemination of information from all agencies engaged in the

271.	Technical advisors in the Joint Information Center will provide information to the Emergency News Manager. JIC support will also be supplied by NextEra Corporate Communications, based out of Florida. The Corporate JIC Manager and Emergency Communications Team (ECT) will work together with the JIC personnel located at the EOF. The Corporate JIC team will provide support remotely or travel to the JIC, dependent on the severity of the emergency. The Corporate JIC Manager and the Emergency News Manager will direct the Joint Information Center organization shown in Figure 8.9, and are the primary spokespeople for the Seabrook Station ERO at the Joint Information Center.	response.  [CEP – B.1.a]  NextEra Corporate Communications and key business units maintain a staff to operate a Joint Information System.  [CEP – B.1.a]  5. Joint Information System (JIS) / Joint Information Center (JIC)  NextEra Corporate Communications and key business units maintain a staff to operate a Joint Information System.  Refer to Sections H.5 and G for JIC/JIS details.  A. Site JIS Manager  Facility/Group Management and Supervision Integration of Offsite Agency Personnel in the ERF  ERF Communications  Media Briefings  Facility Activation  B. Site JIS Coordinator  Media Briefings  Accommodation of News Media Personnel  Facility Activation  Facility Operation  C. Remote JIS Manager— Remote interface position to the corporate JIS  Facility/Group Management and Supervision  ERF Communications  Media Statements  Media Briefings  Accommodation of News Media Personnel  Refr Communications  Media Briefings  Accommodation of News Media Personnel  Media Briefings  Accommodation of News Media Personnel	Non-RIE ERO function and task hierarchy updated consistent with current NRC and industry guidance. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP. Removed figure. ERO defined in Section B of the common emergency plan. No added, removed or altered commitments or change of intent.
272.	8.4 Seabrook Station Corporate Support Seabrook Station Corporate Support is integrated into specific ERO positions. These positions respond as part of an Augmented ERO. Position descriptions are contained in Appendix A. Logistics support for emergency response personnel (e.g., transportation, communications, temporary	[CEP – B.1.b] ERO members responding remotely to an emergency are capable of performing all functions and tasks assigned to their position, including support provided to other ERO members, as described in the emergency plan and implementing procedures.	Non-RIE  ERO function and task hierarchy updated consistent with current NRC and industry guidance.  Refer to Analysis #1 for a detailed comparison evaluation of the ERO

	quarters, food and water, sanitary facilities in the field, and special equipment and supplies procurement) will be arranged by the ERO staff at the Emergency Operations Facility.	These positions support the on-shift staff prior to activation of the TSC and EOF.	positions, functions/tasks, and response time commitments of the CEP. Appendix A removed: Table 1 - ERO prerequisites and background contained in training program description. Table 2 - Staffing assignments and responsibilities documented in Section B of common emergency plan.
273.	8.5 Recovery Organization The emergency measures presented in this plan are actions designed to mitigate the consequences of the accident in a manner that will afford maximum protection to the public. The emergency response organization described in various sections of this plan provides the foundation for the recovery organization. The recovery organization provides the necessary capabilities to restore normal Station activity.	[CEP – Planning Standard M] General plans for recovery and reentry are developed.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Previous general content aligned with planning standard.
274.	The Response Manager will initiate planning for recovery at the EOF. Once the response phase of the emergency is terminated, a Recovery Manager will assume command of recovery efforts. Planning for the recovery mode of operations involves the development of general principles and goals, and an organizational capability that can be adapted to address the particular post-accident conditions. A recovery organization will be formed consisting of members of the normal station organization, the ERO and, if necessary, personnel from regional utilities, nuclear industry groups and consultants/vendors.	[CEP – M.2] The recovery activities would be managed much like a normal outage, except that certain activities unique to the post-accident situation may be controlled by the recovery organization. The recovery organization would function as a matrix management organization to coordinate activities with the normal company organization. This organization may be located at the EOF or the site, as appropriate. The primary positions in the recovery organization are described as follows: • Recovery Manager – Overall management of recovery activities. High level coordination with offsite agencies. • Onsite Recovery Coordinator – Directs the onsite recovery activities. • Offsite Recovery Coordinator – Directs interface with offsite agencies during the recovery. • Radiological Assessment Coordinator (if needed) – Coordinates radiological and environmental assessment with offsite agencies. Coordinates offsite	Non-RIE ERO function and task hierarchy updated consistent with current NRC and industry guidance.

	The Response Manager is directly supported by the staff at the EOF. Expertise in the disciplines of Engineering, Operations and Quality Assurance will be available during the recovery phase. Additionally, the Seabrook Station Training Center staff will be available to evaluate and test proposed operating sequences and recovery actions using the Training Center simulator and technical resources.  8.6 Extensions of Seabrook Station Emergency Response Organization 8.6.1 Local Services Arrangements have been made for the extension of organizational capabilities for handling emergencies. These include the following: 1. Transportation of injured personnel using the Town of Seabrook Fire Department ambulance service; 2. Treatment of radioactively contaminated and injured personnel at Exeter Hospital and Wentworth-Douglass Hospital; and 3. Fire support services by the Town of Seabrook Fire Department and, if necessary, mutual aid.	radwaste management and decontamination activities.  • Spokesperson – Directs the public information program during the recovery phase.  [CEP – M.2]  The recovery activities would be managed much like a normal outage, except that certain activities unique to the post-accident situation may be controlled by the recovery organization. The recovery organization would function as a matrix management organization to coordinate activities with the normal company organization. This organization may be located at the EOF or the site, as appropriate.  [CEP – C.2.d]  Local support organizations may be called to assist onsite for events requiring firefighting, medical, or law enforcement. Immediate assistance with firefighting, medical, and law enforcement at the sites is initiated using pre-established site specific communications systems.  Agreements have been formally developed and documented through memorandums of understanding (MOUs), contracts, and/or letters of agreement (LOAs).  Refer to Element A.4 for details on agreements.	Non-RIE ERO function and task hierarchy updated consistent with current NRC and industry guidance.  Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. No added, removed or altered commitments or change of intent.
277.	Letters of agreement with participating local service organizations are maintained in Appendix D to this plan.	[CEP – A.4] Assistance will be provided, as necessary, by federal response organizations and OROs that are mandated by charter, regulation or law to protect public health and safety. Federal response organizations and OROs cooperate with NextEra and have developed radiological emergency plans and procedures in an integrated manner. Additional support agreements (Letter of Agreement – LOA/Memorandum of Understanding – MOUs) are not required with these agencies.  Support agreements are necessary when an organization or individual is expected to provide	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Appendix D removed from the common emergency plan and site annex and LOAs will be maintained in site files. No added, removed or altered commitments or change of intent.

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assistance to NextEra and is not required otherwise to do so. To that extent, LOAs have been developed between NextEra and several entities to provide emergency response support and services consistent with this plan.

Specifically, the agreement minimum content includes the following:

- A description of the concept of operations, meaning the mutually accepted criteria for implementation.
- When the support will be provided (as a minimum, the agreement states that the support provider will offer its services during an emergency at the affected site(s), including during a Hostile Action).
- Identification of the support to be provided.
- Arrangements for exchange of information during event support.

A contract/purchase order with a private contractor is considered acceptable in lieu of a LOA for the specified duration of the contract. The current signature copies of applicable LOAs and contracts are listed in the site annexes and are maintained locally on file.

[Annex - A.4]

Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by Seabrook Station with the following organizations:

- State of New Hampshire and Commonwealth of Massachusetts
- Town of Seabrook Fire Department, Ambulance Service
- Town of Seabrook Fire Department, Fire Support Service
- Exeter Hospital
- Wentworth-Douglass Hospital
- Portsmouth Police Department
- Pease Development Authority (EOF Space)
   Letters of agreement with participating local service organizations are maintained in Emergency
   Preparedness Department files.

Current to Proposed Emergency Plan Comparison Analysis

278.	The Seabrook Station Physical Security Plan includes
	a description of external organizations (LLEA) that
	would support response to a hostile action based
	event. Agreements with appropriate LLEA for this
	purpose are maintained by the Seabrook Station
	Security Department. LLEA provisions in the Physical
	Security Plan and supporting agreements meet the
	requirements of 10 CFR 50 Appendix E. IV. A. 7.

## [Annex – A.4]

Site specific letters of agreement (LOAs) or memorandums of understanding (MOUs), are maintained by Seabrook Station with the following organizations:

Portsmouth Police Department

#### **Editorial**

Agreements with the LLEA are maintained by the security department.

No added, removed or altered commitments or change of intent.

# 279. 8.6.2 Federal Government Support Appropriate Federal agency resources would be made available in accordance with the National Response Framework, Nuclear/Radiological Incident Annex. This plan is activated through Station notification of the NRC. Available resources include offsite radiological assessment, under the leadership of the Department of Energy. This effort would involve manpower and equipment for extensive plume measurement, including aerial monitoring and tracking, and sampling and analysis of ingestion pathway media. The STED, Site Emergency Director and Response Manager have the authority to request Federal assistance.

## [CEP - C.2.a]

The individual authorized to request assistance and resources from responding organizations is the Emergency Director.

Refer to Element B.2.a for greater detail regarding command & control.

[CEP - C.2.b]

Refer to Elements A.1.a and A.4 for the description and details of the provisions made for additional assistance and resources.

[CEP - A.1.a]

# 2. Federal Organizations

Control, responsibility and interface of federal organizations is governed by the National Response Framework (NRF) and the Nuclear/Radiological Incident Annex to the NRF when they are called to respond to an event at a nuclear power plant. The NRC acts as the lead federal agency with regard to technical matters during a nuclear incident, including providing radiological assistance.

[CEP - A.4]

Assistance will be provided, as necessary, by federal response organizations and OROs that are mandated by charter, regulation or law to protect public health and safety. Federal response organizations and OROs cooperate with NextEra and have developed radiological emergency plans and procedures in an integrated manner. Additional support agreements (Letter of Agreement – LOA/Memorandum of Understanding – MOUs) are not required with these agencies.

Support agreements are necessary when an organization or individual is expected to provide

#### Non-RIE

The CEP and Annexes are formatted in a 50.47(b) outline. No added, removed or altered commitments or change of intent.

Current to Proposed Emergency Plan Comparison Analysis

assistance to NextEra and is not required otherwise to do so. To that extent, LOAs have been developed between NextEra and several entities to provide emergency response support and services consistent with this plan.

Specifically, the agreement minimum content includes the following:

- A description of the concept of operations, meaning the mutually accepted criteria for implementation.
- When the support will be provided (as a minimum, the agreement states that the support provider will offer its services during an emergency at the affected site(s), including during a Hostile Action).
- Identification of the support to be provided.
- Arrangements for exchange of information during event support.

A contract/purchase order with a private contractor is considered acceptable in lieu of a LOA for the specified duration of the contract. The current signature copies of applicable LOAs and contracts are listed in the site annexes and are maintained locally on file.

280. 8.6.3 Private Organization Support
Depending on the emergency conditions and the response needs, the Seabrook Station ERO can

response needs, the Seabrook Station ERO can be augmented by personnel and equipment support arranged through the Institute of Nuclear Power Operations (INPO). The Response Manager and/or the Site Emergency Director will be responsible for the decision to request industry response through INPO. All industry organizations reporting to the Station will be required to report to Station emergency management who will specify the authorities, responsibilities and limits on the actions of these organizations. All response organizations will be required to adhere to all existing Station procedures while completing their activities.

[CEP - C.2.a]

The individual authorized to request assistance and resources from responding organizations is the Emergency Director.

Refer to Element B.2.a for greater detail regarding command & control.

[CEP - C.2.b]

Refer to Elements A.1.a and A.4 for the description and details of the provisions made for additional assistance and resources.

[CEP - A.4]

Assistance will be provided, as necessary, by federal response organizations and OROs that are mandated by charter, regulation or law to protect public health and safety. Federal response organizations and OROs cooperate with NextEra and have developed radiological emergency plans and procedures in an integrated manner. Additional support agreements (Letter of Agreement – LOA/Memorandum of

Non-RIE

The CEP and Annexes are formatted in a 50.47(b) outline. No added, removed or altered commitments or change of intent.

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Understanding – MOUs) are not required with these agencies.

Support agreements are necessary when an organization or individual is expected to provide assistance to NextEra and is not required otherwise to do so. To that extent, LOAs have been developed between NextEra and several entities to provide emergency response support and services consistent with this plan.

Specifically, the agreement minimum content includes the following:

- A description of the concept of operations, meaning the mutually accepted criteria for implementation.
- When the support will be provided (as a minimum, the agreement states that the support provider will offer its services during an emergency at the affected site(s), including during a Hostile Action).
- Identification of the support to be provided.
- Arrangements for exchange of information during event support.

A contract/purchase order with a private contractor is considered acceptable in lieu of a LOA for the specified duration of the contract. The current signature copies of applicable LOAs and contracts are listed in the site annexes and are maintained locally on file.

[CEP - B.5]

- 1. Institute of Nuclear Power Operations (INPO) INPO has an emergency response plan that enables it to provide the assistance in locating sources of emergency personnel, equipment, and operational analysis.
- 2. Other External (non-NextEra) Support Organizations

Other external (non-NextEra) support organizations are not used to provide additional personnel for positions on the NextEra ERO or to perform an operational role. Other external (non-NextEra) support organizations that may be requested to provide technical assistance are described in the site annexes.

281.	8.7 Coordination with State Government Authorities	[Annex – B.5] Other External (non-NextEra) Support Organizations Westinghouse (the NSSS vendor for Seabrook Station): Upon request, Westinghouse will provide emergency technical assistance, including equipment and/or services, in support of Seabrook Station in the unlikely event of an emergency.  [CEP – A.1.a]	Non-RIE
	Because of the location of Seabrook Station, the planning for and implementation of State response actions involve two states, New Hampshire and Massachusetts. The Seabrook Station Radiological Emergency Plan has been developed to provide for a coordinated response with the plans of offsite governmental agencies.	3. Offsite Response Organizations The NextEra ERO coordinates response actions with OROs. Interface between the site and the OROs is governed by their respective emergency plans, which are developed and maintained in coordination with the NextEra emergency plan. OROs are described in the site annexes. [Annex – A.1.a] 3. Offsite Response Organizations (OROs) Seabrook Station is responsible for determining and conveying specific accident information, dose assessment information and protective action recommendations to the State of New Hampshire and Commonwealth of Massachusetts. It is the responsibility the States to evaluate this information, and then determine and implement appropriate protective actions in accordance with their plans and procedures. The local governments will provide the resources needed to implement these actions. Should local resources be exhausted or additional resources needed to accomplish actions in a timely manner, state governments will provide any additional support needed.	The CEP and Annexes are formatted in a 50.47(b) outline.  No added, removed or altered commitments or change of intent.
282.	Both New Hampshire and Massachusetts, as well as the localities within the plume EPZ, have prepared plans for a response to an emergency at Seabrook Station. In addition, the State of Maine, which lies within the ingestion EPZ, has the capability to carry out appropriate response actions. These plans describe their respective responsibilities, authorities, capabilities, and emergency functions.	[Annex – A.1.a] d. Local Governments Both New Hampshire and Massachusetts, as well as the localities within the plume EPZ, have prepared plans for a response to an emergency at Seabrook Station. Refer to the state and local Emergency Operations Plans for details on their concept of operations. c. The State of Maine In addition, the State of Maine, which lies within the	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. No added, removed or altered commitments or change of intent.

		T	
		ingestion EPZ, has the capability to carry out appropriate response actions. These plans describe	
		their respective responsibilities, authorities,	
		capabilities, and emergency functions.	
283.	Section 7.0 of this plan describes the communications	[CEP – E.1]	Non-RIE
	network that has been developed between Seabrook	2. ORO Event Notification	The CEP and Annexes are
	Station and these states as a means of promptly notifying appropriate authorities of Station emergency	NextEra, in cooperation with the OROs, has	formatted in a 50.47(b) outline.
	conditions. The Short Term Emergency Director	established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is	Notification process and communication with ORO described
	notifies New Hampshire State Police and	initially declared, or upgraded, or changes are made	in common emergency plan and
	Massachusetts Emergency Management Agency	to PARs, a notification to the OROs is made within 15	site annex Sections E and F.
	using the dedicated Nuclear Alert System (NAS). This	minutes.	
	notification keys mobilization of various levels of emergency response dependent on the emergency	Receipt location of notification messages is site	
	classification.	specific. ORO notification locations are described in	
		the site annexes. [Annex - E.1]	
		2. ORO Notification	
		The following state 24/7 warning points are notified of	
		a declared emergency at Seabrook Station:	
		New Hampshire State Police (NHSP)	
		Communications Center Dispatcher	
		Massachusetts Emergency Management Agency (MEMA) 24-hour Dispatcher	
		[Annex – F.1.a]	
		Nuclear Alert System	
		The Nuclear Alert System (NAS), originating in the	
		Control Room, and comprised of leased telephone	
		lines, is used to notify the state 24/7 warning points of	
		a declared emergency at Seabrook Station.	
		The Nuclear Alert System (NAS) has been installed in the two states' Emergency Operations Centers	
		(EOCs), the MA Region I EOC in Tewksbury, the NH	
		Rockingham County warning point in Brentwood, and	
		the Emergency Operations Facility (EOF).	
		Provisions are made for backup power to the Nuclear Alert System.	
284.	Dependent upon the emergency classification, both	[CEP - H.3]	Non-RIE
	New Hampshire and Massachusetts would dispatch	The Emergency Operations Facility (EOF) provides a	State response is contained within
	radiological health and emergency management	dedicated location for support of the site event	the state plans. The Seabrook EOF
	representatives to the EOF for first-hand emergency information.	response activities. The EOF is sized to	is sized to accommodate state
	IIIIOIIIIauOII.		

accommodate ERO responders and NRC, FEMA, radiological health and emergency and state representatives. management representatives [Annex H.3] The EOF has sufficient assembly space and is designed to accommodate responding representatives from government and industry. The EOF serves as the base of operations for Station material control, coordination of industry support, and establishment of a long-term organization to recover from the accident conditions and results. The EOF can serve as a centralized meeting location for key representatives from offsite authorities and Station management. The EOF can also act as a focal point for the coordination and acquisition of company resources and liaison with the Seabrook Station Joint Owners, American Nuclear Insurers and Institute of Nuclear Power Operations (INPO). The EOF Coordinator coordinates radiological [CEP - H.3] Non-RIE accident information and its meaning with both State The EOF is activated when minimum staffing CEP limits command and control and Federal emergency response organizations. requirements are met, key systems and equipment and non-delegable functions to the Government requests for non-radiological information are verified operational, and the ERO personnel are SM and SED. and specifically those regarding emergency prepared to perform their functions. When activated, Refer to Analysis #1 and Analysis management issues will be addressed by the the EOF's primary functions include: #2 for a detailed comparison Response Manager. Based on accident assessment, · Coordinate emergency response activities with evaluation of the ERO positions, protective measures will be recommended by federal, state, and local authorities functions/tasks, and response time Seabrook Station and implemented by each state Coordinate support activities performed by commitments of the CEP. according to actions prescribed by each state's personnel brought in to assist NextEra personnel Radiological Emergency Response Plan. · Perform offsite dose assessment and field monitoring activities. Development of dose based offsite protective actions recommendations. · Coordination of emergency response activities with federal, state, and local authorities. · Coordination of radiological and environmental assessment activities with offsite agencies. Communicate with the NRC HPN line. Coordinate corporate support. · Support site acquisition of external assistance (technical, craft, admin, etc.). Support site acquisition of equipment, supply, and logistic resources.

[CEP - H.1] The TSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the TSC's primary functions include: Provide ERO command & control Continued evaluation of event conditions Develop and issue offsite protective actions recommendations Develop ORO event notifications • Provide ENS communications with the NRC · Display and trend plant data Develop response priorities and mitigative actions Coordination of site emergency response actions Provide engineering support [CEP-B.2.a] The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level. Non-delegable responsibilities include the following: Event declaration ORO and NRC Notification PARs for the general public • Emergency Exposure (Dose limits and KI) Approving departures from license conditions per 10 CFR 50.54(x) transition from the Shift Manager to the Site Emergency Director upon transfer of command and control. The ERO Technical Liaison reviews plant technical [CEP - B.1.a] Non-RIE information by telephone with offsite officials in the 4. Emergency Operations Facility (EOF) ERO function and task hierarchy state emergency operations centers (EOCs). A. EOF Manager updated consistent with current Seabrook Station technical representatives report to Organizational Interface and Coordination NRC and industry guidance. the New Hampshire and Massachusetts State EOCs Continuous Emergency Response Operations Refer to Analysis #1 and Analysis to facilitate the review of plant information with state Facility/Group Management and Supervision #2 for a detailed comparison emergency response officials. The ERO Technical Contact and Use of External Support Services evaluation of the ERO positions, Liaison reviews plant information directly with New · Integration of Offsite Agency Personnel in the ERF functions/tasks, and response time Hampshire and Massachusetts emergency response Dispatch and Control of Offsite EOC Liaisons commitments of the CEP. representatives at the Seabrook Station EOF.

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		• ERF Communications
		Facility Activation
		• Facility Operation
		Site Evacuation
		• Recovery
287	Figures 8.13 and 8.14 provide a summary of the	[Annex - A.1.a] Editorial
	radiological emergency responsibilities and functions	3. Offsite Response Organizations (OROs)  Figures now part of Annex Section
	assigned to various Massachusetts and New	
		a
	Hampshire state authorities. The Station maintains an	The State of New Hampshire Supports response
	updated copy of each state's Emergency Plan and	activities of the Seabrook site in accordance with the commitments or change of intent.
	associated implementing procedures.	following table:
		Key
		P = Primary
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		AGENCY
		NH Division of Homeland Security S S P P S P S S S P S S S P S S
		and Emer. Management         S         S         P         S
		State Police         P S P         S         P P         S           Transportation         S S S S S S S S S S S S S S S S S S S
		Pupil Transportation Safety S S S S S S S S S S S S S S S S S S S
		Division of Human Services S P S P
		National Guard
		Resources & Economic S S S S
		Development Department of Agriculture SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS
		Environmental Services
		Walline ratur
		J.S. Coast Guard S S S
		Federal Aviation Admin.  Red Cross  P S P S P S
		Education S S S S S
		Public Utilities Commission S S S P S S P S
		b. Commonwealth of Massachusetts
		The Commonwealth of Massachusetts supports
		response activities of the Seabrook site in
		accordance with the following table:
		accordance with the following table.

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		Rey   P   Primary   S   S   S   S   S   S   S   S   S	
288.	Information is coordinated with the Maine Emergency Management Agency by New Hampshire authorities for ingestion pathway considerations. Additional state support can be called upon from participating states in the New England Compact on Radiological Health Protection.	[Annex - A.1.a] 3. Offsite Response Organizations (OROs) c. The State of Maine In addition, the State of Maine, which lies within the ingestion EPZ, has the capability to carry out appropriate response actions. These plans describe their respective responsibilities, authorities, capabilities, and emergency functions.	Non-RIE State response is contained within the state plans. The Seabrook coordinates with the State of Maine for the planning effort.
289.	Figure 8.1 On-Shift Emergency Response Organization		Editorial Removed figure. ERO defined in Section B of the common emergency plan. No added, removed or altered commitments or change of intent.
290.	Figure 8.2 Augmented Emergency Response Organization for Unusual Event		Potential RIE 6-1 Refer to assessment Section 3.1 for the disposition of this item.
291.	Figure 8.3 Augmented Emergency Response Organization for Alert, Site Area Emergency, and General Emergency		Editorial  Removed figure. ERO defined in Section B of the common emergency plan.  No added, removed or altered commitments or change of intent.
292.	Figure 8.4 Emergency Operations Facility Staff		Editorial Removed figure. ERO defined in Section B of the common emergency plan.

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		No added, removed or altered commitments or change of intent.
293.	Figure 8.5 Operational Support Center Staff	Editorial
		Removed figure. ERO defined in Section B of the common emergency plan.
		No added, removed or altered commitments or change of intent.
294.	Figure 8.6 Technical Support Center (TSC) Staff	Editorial
		Removed figure. ERO defined in Section B of the common emergency plan.
		No added, removed or altered commitments or change of intent.
295.	Figure 8.7 Canceled	N/A
296.	Figure 8.9 Joint Information Center Staff	Editorial
		Removed figure. ERO defined in Section B of the common emergency plan.
		No added, removed or altered commitments or change of intent.
297.	Figure 8.12 On-Shift Emergency Response Organization Actions	Non-RIE Removed figure. ERO defined in Section B of the common emergency plan. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
298.	Figure 8.13 Summary of the Radiological Emergency Responsibilities and Functions of the Massachusetts State Authorities	Editorial Figures now part of Annex Section A.1.a. No added, removed or altered commitments or change of intent.
299.	Figure 8.14 Summary of the Radiological Emergency Responsibilities and Functions of the New Hampshire State Authorities	Editorial Figures now part of Annex Section A.1.a.

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			No added, removed or altered commitments or change of intent.
300.	Figure 8.15 Comparison of NUREG-0654 Emergency Response Staffing Goals with the Seabrook Station Emergency Response Organization (ERO)		Non-RIE Removed figure. The CEP and site annexes align with the 16 planning standards of NUREG-0654 with level of detail consistent with NUREG-0654 R2 elements.
301.	Figure 8.16 Seabrook Station News Services Staff		Editorial
			Removed figure. ERO defined in Section B of the common emergency plan.  No added, removed or altered commitments or change of intent.
	Section 9.0, Emergency Response Outline		
302.	9.1 Initiation Upon the recognition of abnormal Station conditions either through initiation of Emergency Operating Procedures (EOPs) or other sources of information, the condition will be classified in accordance with the method described in Section 5.0. Once an emergency is classified, the response actions are directed by Emergency Response (ER) procedures contained in the Emergency Response Manual (SSER). Procedures exist that direct the appropriate response for each of the four emergency classifications.	[CEP – D.3]  NextEra maintains procedures that include immediate actions to be taken that are consistent with any declared ECL.  Emergency Operating Procedures provide instructions to Control Room personnel to assist in mitigating the consequences of a broad range of accidents and multiple equipment failures. These procedures are based on guidelines developed by the owners' groups.  Emergency plan implementing procedures provide instructions to ERO personnel for response activities primarily associated with assessment, classification, notification and protective actions. Other functions such as communications, termination and recovery are also addressed.	Editorial The CEP and Annexes are formatted in a 50.47(b) outline. Provided list of typical actions by ECL. No added, removed or altered commitments or change of intent.
303.	9.2 Activation of the Emergency Organization The Unit Supervisor is responsible for recognizing potential emergency conditions and notifying the Shift Manager. The Unit Supervisor will assume the duties and responsibilities of the Short Term Emergency Director (STED) until the Shift Manager responds to the Control Room. With an emergency declared in accordance with Procedure ER 1.1, Classification of Emergencies, the Shift Manager assumes the role of	[CEP - A.1.a] 1. NextEra Emergencies are initially declared and responded to by the on-shift staff under the direction of the Shift Manager. Augmentation of the shift ERO is required at the Alert emergency classification level or higher, and discretionary at the Unusual Event emergency classification level. The ERO has the capability to expand or contract to meet the needs of the	Non-RIE Previous ERO titles. Current ERO titles and responsibilities documented in Section B of common emergency plan. The CEP and Annexes are formatted in a 50.47(b) outline. Provided list of typical actions by ECL.

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STED and ensures the activation of the Emergency Response Organization (ERO) according to Section 8.0.

Upon declaration of an emergency, the STED will direct implementation of Procedure ER 1.2, Emergency Plan Activation. The STED will relinquish direction of the ERO upon the arrival and briefing of the Site Emergency Director.

emergency.

[CEP - B.2]

The Shift Manager is the individual who is on-shift at all times and assumes the role of Emergency Director upon emergency declaration. As Emergency Director, the Shift Manager has the authority and responsibility to immediately and unilaterally initiate any emergency actions, including providing protective action recommendations (PARs) to authorities responsible for implementing offsite emergency measures.

[CEP - B.2.a]

The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level.

# **304.** 9.2.1 Unusual Event Response

Upon the declaration of an Unusual Event, the STED will direct the notification of Station personnel (via the Station public address system) and the Primary Responders (via a digital paging system). The Primary Responders are shown in Figure 8.2, "Augmented Emergency Response Organization (ERO)-Unusual Event" and are the supplementary personnel designated to assist the on-shift staff in an Unusual Event. Offsite emergency organizations are notified and assistance from offsite fire, medical and law enforcement organizations will be requested, as necessary.

# [CEP - D.3]

- 1.Unusual Event (UE)
- Notification of ERO personnel. This is an information only notification and does not require activation of emergency facilities or response organizations. Any Emergency Response Facility (ERF) may be activated at the discretion of the Emergency Director. [CEP F.1.c]

NextEra sites use an automated ERO notification system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location.

# [CEP - A.1.a]

When the emergency response facilities are staffed the augmenting ERO relieves the on-shift personnel of emergency response functions not directly associated with unit operations. NextEra overall responsibilities for event response are as follows:

- Recognize, classify and declare an emergency.
- Notify appropriate NextEra personnel, federal, and OROs.
- Request additional support from federal, ORO, and

#### Potential RIE 6-1

Refer to assessment Section 3.1 for the disposition of this item.

		private organizations.  • Establish and maintain effective communications with onsite and offsite entities.  Continuously assess the consequences of the accident, and periodically communicate response status and assessment information to the appropriate groups and authorities.  • Take protective actions onsite and recommend protective actions to offsite authorities.  • Monitor and control radiation exposure of personnel responding during an emergency.  • In conjunction with OROs, provide emergency information to the media and public through periodic media briefings and media statements.  [CEP – C.2.d]  Local support organizations may be called to assist onsite for events requiring firefighting, medical, or law enforcement. Immediate assistance with firefighting, medical, and law enforcement at the sites is initiated using pre-established site specific communications systems.	
305.	During an Unusual Event, the Site Emergency Director, Operations Technician, Health Physics Coordinator, Technical Services Coordinator and ERO Technical Liaison respond to the Control Room or Technical Support Center. The Site Emergency Director will relieve the STED of emergency response command and control duties. The Response Manager will obtain a briefing from the Site Emergency Director or Short Term Emergency Director prior to or after reporting to an appropriate onsite or offsite reporting location. The Response Manager will notify Seabrook Station executive management. The EOF Coordinator and the Emergency News Manager will obtain a briefing from the Response Manager. The Emergency News Manager reports to the Seabrook Station site to coordinate public information needs.	[CEP – D.3]  1.Unusual Event (UE)  Notification of ERO personnel. This is an information only notification and does not require activation of emergency facilities or response organizations. Any Emergency Response Facility (ERF) may be activated at the discretion of the Emergency Director. [CEP - F.1.c]  NextEra sites use an automated ERO notification system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location.	Potential RIE 6-1 Refer to assessment Section 3.1 for the disposition of this item.
306.	No Station emergency response facilities are automatically activated during an Unusual Event, although the Site Emergency Director may, at his	[CEP – D.3] 1.Unusual Event (UE) • Notification of ERO personnel. This is an information	Editorial No added, removed or altered commitments or change of intent.

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discretion, activate any or all facilities. only notification and does not require activation of emergency facilities or response organizations. Any Emergency Response Facility (ERF) may be activated at the discretion of the Emergency Director. The response required as a result of this declaration [CEP - E.1] Potential RIE 6-1 307. varies according to the specific event, but a general 1. ERO Notification Refer to assessment Section 3.1 for summary of actions taken is described below: The Emergency Director will direct or perform the disposition of this item. On duty operating and selected Station notification of the ERO for all emergency classification personnel will assume the duties specified in levels. ERO personnel report to their assigned Section 8.0: emergency response facilities as directed. In the The STED will ensure that New Hampshire event of a security threat, personnel may be State Police and Massachusetts Emergency instructed to respond to alternative facilities, or seek Management Agency have been notified. In cover if on-site. turn, the offsite warning points will notify the [CEP - B.2] appropriate authorities designated in their plans The Emergency Director ERO position has overall The STED will ensure that the NRC has been 3. command and control of a declared emergency at a notified and that a communication channel NextEra site. remains open until the condition has been The Shift Manager is the individual who is on-shift at terminated (unless permission is granted to all times and assumes the role of Emergency Director establish a callback time): upon emergency declaration. As Emergency Director, 4. The STED will direct the activities of the Onthe Shift Manager has the authority and responsibility Shift Emergency Response Organization; to immediately and unilaterally initiate any emergency The STED will ensure activation of the digital actions, including providing protective action paging system to initiate emergency notification recommendations (PARs) to authorities responsible 6. The Primary Responders will respond as for implementing offsite emergency measures., discussed above; The Shift Manager maintains overall command and Should it be necessary, the Site Emergency control until relieved. Director would direct additional notifications by [CEP - B.2.a] telephone to augment the existing ERO to the The Site Emergency Director will relieve the Shift level required by the nature of the emergency Manager of overall Command and Control and the condition: other key functions listed in Table B-1 at an Alert or If necessary, appropriate emergency medical, higher emergency classification level. fire department or law enforcement agencies Non-delegable responsibilities include the following: will be notified and requested to respond; Event declaration The Emergency News Manager will direct preparation of public information releases ORO and NRC Notification appropriate to the event; and PARs for the general public 10. The Site Emergency Director will close out • Emergency Exposure (Dose limits and KI) the event with a notification to offsite authorities or Approving departures from license conditions per 10 escalate to a more severe class. CFR 50.54(x) transition from the Shift Manager to the Site Emergency Director upon transfer of command and control.

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#### [CEP - B.1.a] 2. Technical Support Center (TSC) A. Site Emergency Director Organizational Interface and Coordination Federal Assistance Continuous Emergency Response Operations Command and Control • Facility/Group Management and Supervision Contact and Use of External Support Services · Integration of Offsite Agency Personnel in the ERF NRC Notification and Communications Event Classification State and Local Event Notification ERF Communications · Facility Activation Backup and Alternative Facilities Accident Detection and Assessment OSC Team Priorities, Dispatch and Control Site Assembly and Accountability Site Evacuation ERO Radiological Protection Offsite Protective Action Recommendations Emergency Exposure Event Termination Recovery [CEP - M.3] The Emergency Director will inform the ERO, OROs, and NRC upon exiting the state of emergency and either returning to normal organizational control or entering recovery. Alert Response 9.2.2 [CEP - D.3] **Editorial** 308. Upon the declaration of or escalation to an Alert, Alert Removed figure. ERO offsite emergency organizations are notified in Initial and follow-up event notification to the OROs responsibilities defined in Section B accordance with Procedure ER 1.2, Emergency Plan and NRC. of the common emergency plan. Activation. The Station emergency response Augmentation of the shift ERO (refer to Element No added, removed or altered organization becomes fully activated and the A.1.a) by activating the Technical Support Center, commitments or change of intent. following actions are taken in addition to those Operations Support Center and Emergency described in Section 9.2.1. An overview of reporting Operations Facility. locations for site personnel is presented in Figure 9.1. • The Joint Information System shall be established at Reporting Instructions for Onsite Personnel.

309.	An Augmented ERO, consisting of both Primary and Secondary Responders, is activated. This Augmented ERO is shown in Figure 8.3. Additional details regarding this organization are provided in Figures 8.4 through 8.6 and Figure 8.9.	this ECL, with Joint Information Center activation determined in coordination with the offsite agencies.  • If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.  [CEP – Table B.1]  Table B.1 provides listing of ERO by function [CEP – B.1.b]  The NextEra ERO includes remote response positions. Remote response positions are not required to physically manipulate plant equipment or take other physical actions at the site. Remote response positions are provided the resources to collaborate with ERO personnel in their assigned emergency facility. These resources provide;  • the ability to communication audio/visually between emergency facility and the remote responder.  • the ability to access procedures, information and data.	Non-RIE The Common Emergency Plan (CEP) no longer differentiates by Primary, Subject to Call and Secondary responders. The CEP identifies minimum staff positions, non-minimum staff positions will be identified in the implementing procedures. Current ERO documented in Section B of common emergency plan. Refer to Analysis #1 and Analysis #2 for a detailed comparison
000	An Augus ant ad EDO consisting of both Drive on and	developed.	Non DIE
309.	Secondary Responders, is activated. This Augmented ERO is shown in Figure 8.3. Additional details regarding this organization are provided in Figures	Table B.1 provides listing of ERO by function [CEP – B.1.b] The NextEra ERO includes remote response positions. Remote response positions are not required to physically manipulate plant equipment or take other physical actions at the site. Remote response positions are provided the resources to collaborate with ERO personnel in their assigned emergency facility. These resources provide;  • the ability to communication audio/visually between emergency facility and the remote responder.	The Common Emergency Plan (CEP) no longer differentiates by Primary, Subject to Call and Secondary responders. The CEP identifies minimum staff positions, non-minimum staff positions will be identified in the implementing procedures. Current ERO documented in Section B of common emergency plan. Refer to Analysis #1 and Analysis

310.	Primary Responders and Subject-to-Call Responders are personnel required to meet ERO staff augmentation goals or who should be present for activation of emergency response facilities. These responders are instructed to report to their assigned emergency facilities when their pagers are activated for an Alert or higher classification level.	Remote Dose Assessor position. Additionally, the Shift Dose Assessor from another NextEra site are capable of supporting the affected site as a backup to the Remote Dose Assessor position.  [CEP – H.1]  The TSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the TSC's primary functions include:  [CEP - H.2]  The OSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the OSC's primary functions include:  [CEP – H.3]  The EOF is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the EOF's primary functions include:  [CEP – H.5]  A near-site JIC (outside the 10 mile EPZ) is established for each site. ERO staffing of the JIC is concurrent with other ERFs, although facility activation is coordinated with the joint offsite agencies and has no time requirement.	Non-RIE The Common Emergency Plan (CEP) no longer differentiates by Primary, Subject to Call and Secondary responders. The CEP identifies minimum staff positions, non-minimum staff positions will be identified in the implementing procedures. Current ERO documented in Section B of common emergency plan. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
311.	During normal work hours, Secondary Responders are notified by pager, the Station public address system, an onsite siren or security personnel. During backshifts, weekends, and holidays, Secondary Responders are notified via the automated emergency telephone notification service, a commercial computer-based callout system, which is activated by Security personnel.	[CEP – E.1]  1. ERO Notification The Emergency Director will direct or perform notification of the ERO for all emergency classification levels. ERO personnel report to their assigned emergency response facilities as directed. In the event of a security threat, personnel may be instructed to respond to alternative facilities, or seek cover if on-site. The means for alerting and notifying ERO members are described in Element F.1.c. [CEP - F.1.c] NextEra sites use an automated ERO notification	Non-RIE The Common Emergency Plan (CEP) no longer differentiates by Primary, Subject to Call and Secondary responders. The CEP identifies minimum staff positions, non-minimum staff positions will be identified in the implementing procedures. Current ERO documented in Section B of common emergency plan. ERO notified same method

312.	The Technical Support Center (TSC), Operational Support Center (OSC), Emergency Operations Facility (EOF), and the Joint Information Center (JIC) will be activated and staffed. Staffing assignments for the ERO are described in Appendix A.	system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location.  CEP – D.3] 2.Alert  • Augmentation of the shift ERO (refer to Element A.1.a) by activating the Technical Support Center, Operations Support Center and Emergency Operations Facility.	regardless of time of day. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.  Non-RIE Staffing assignments and responsibilities documented in Section B of common emergency plan. Appendix A removed: Table 1 - ERO prerequisites and background contained in training program description. Table 2 - Staffing assignments and responsibilities documented in Section B of common emergency plan.
313.	Seabrook Station has established the goal of activating the TSC, OSC and EOF no later than one (1) hour following the declaration of an Alert or higher emergency classification level. Primary Responder and Subject-to-Call Responder positions in each of the facilities are expected to be filled and ready to function within the one hour goal. The specific positions that are expected to be filled within the one hour goal are delineated in the operational procedures for each facility. Other Secondary Responders are expected to report to their assigned emergency facilities as soon as possible after they receive notification of an Alert or higher emergency declaration. Other Secondary Responder positions may be filled by qualified personnel who are called-in after facilities have been activated and beyond the one hour facility activation goal, but all ERO positions are expected to be filled as soon as possible following declaration of an Alert or higher emergency. Emergency plan implementing procedures provide guidance for accounting for the status of all ERO positions, for identifying any vacant positions and for	[CEP – H.1] The TSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the TSC's primary functions include: [CEP - H.2] The OSC is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the OSC's primary functions include: [CEP – H.3] The EOF is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the EOF's primary functions include: [CEP – H.5] A near-site JIC (outside the 10 mile EPZ) is established for each site. ERO staffing of the JIC is concurrent with other ERFs, although facility	Non-RIE The Common Emergency Plan (CEP) no longer differentiates by Primary, Subject to Call and Secondary responders. The CEP identifies minimum staff positions, non-minimum staff positions will be identified in the implementing procedures. Current ERO documented in Section B of common emergency plan. No functional changes are made to the TSC, OSC or EOF. Facility activation time is now tied to ERO response time requirements (refer to Table B-1) facility and personnel readiness. Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time

	calling-in qualified staff to fill vacancies.	activation is coordinated with the joint offsite agencies and has no time requirement.	commitments of the CEP.
314.	Alternative Technical Support Center and Operational Support Center are designated areas within the EOF where TSC and OSC personnel assemble for hostile action based events or other catastrophic events that prevent site access. The Assembly Area for backup emergency response organization personnel is located outside the Protected Area in the Seabrook Station Conference Center. For emergencies declared during normal working hours, this facility is activated at an Alert or Site Area Emergency or General Emergency, depending upon event meteorological and radiological conditions. The purpose for this facility is to (1) ensure that adequate manpower exists for the staffing of all emergency facilities, (2) develop a roster of available second shift personnel and (3) disseminate reporting information to second shift personnel (e.g., when and where to report).  Maintenance technicians (mechanics, electricians, I&C technicians) will assemble at the Assembly Area if an Alert or higher emergency classification is declared during normal daytime working hours.  Maintenance technicians working on swing or midshifts when an Alert or higher emergency classification is declared will report to the Operational Support Center. During outages when the station is in Mode 5 or 6, non-ERO assigned personnel working outage assignments on any shift will assemble at the Assembly Area. ERO and outage management will determine what outage personnel are needed to resume outage related work. Other personnel will be directed to leave the site.	[CEP – H.4] An alternative facility provides a location for the staging of ERO personnel in the event of a Security or Hostile Action threat for each NextEra site. The alternative facility may also serve as an evacuation location for TSC and OSC personnel should those facilities become uninhabitable. The alternative facility can communicate with the Control Room, site security, and EOF. The functions of offsite notification and PARs can be performed from the Alternative Facility. Emergency response team planning and preparation can be performed from the Alternative Facility. Site specific details of the alternative facilities are described in the site annexes. [Annex – H.4] An alternative facility for TSC responders has been identified as a designated area in the EOF for hostile action-based events or other catastrophic events Appendix E, Section IV, E, 8, d. Procedures for TSC responders are located in the alternative facility. An alternative facility for OSC responders has been identified as a designated area in the EOF for hostile action-based events or other catastrophic events that prevent site access in accordance with 10 CFR 50 Appendix E, Section IV, E, 8, d. Procedures for OSC responders are located in the alternative facility	Non-RIE Removed details on second shift. No added, removed or altered commitments or change of intent.
315.	The following additional actions will be completed in the event of an Alert classification:  1. The Response Manager will report to the EOF and assume responsibility for providing overall emergency response organization direction to restore Station stability;  2. The Massachusetts and New Hampshire state emergency response teams are alerted, and	[CEP – B.2.a] The Site Emergency Director will relieve the Shift Manager of overall Command and Control and the other key functions listed in Table B-1 at an Alert or higher emergency classification level. Non-delegable responsibilities include the following: • Event declaration	Non-RIE  CEP limits command and control and non-delegable functions to the SM and SED.  Staffing assignments and responsibilities documented in Section B of common emergency plan.

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specific representatives will be dispatched to the Station EOF;

- 3. The EOF Coordinator will provide offsite authorities with periodic meteorological assessments and, if releases are occurring, projected dose estimates (NOTE: If radiological releases are occurring, monitoring teams will be dispatched to determine actual area dose rates):
- 4. Information will be coordinated, as necessary, with ANI and INPO; and
- 5. The Response Manager or designee will close out the event. The Site Emergency Director will either downgrade the classification or escalate it to a Site Area or General Emergency.

- ORO and NRC Notification
- PARs for the general public
- Emergency Exposure (Dose limits and KI) ICEP B.1.al
- 4. Emergency Operations Facility (EOF)

## A. EOF Manager

- Organizational Interface and Coordination
- Continuous Emergency Response Operations
- Facility/Group Management and Supervision
- · Contact and Use of External Support Services
- Integration of Offsite Agency Personnel in the ERF
- Dispatch and Control of Offsite EOC Liaisons
- ERF Communications
- · Facility Activation
- Facility Operation
- Site Evacuation
- Recovery

[CEP - H.3]

The EOF is activated when minimum staffing requirements are met, key systems and equipment are verified operational, and the ERO personnel are prepared to perform their functions. When activated, the EOF's primary functions include:

- Coordinate emergency response activities with federal, state, and local authorities
- Coordinate support activities performed by personnel brought in to assist NextEra personnel
- Perform offsite dose assessment and field monitoring activities.
- Development of dose based offsite protective actions recommendations.
- Coordination of emergency response activities with federal, state, and local authorities.
- Coordination of radiological and environmental assessment activities with offsite agencies.
- Communicate with the NRC HPN line.
- Coordinate corporate support.
- Support site acquisition of external assistance (technical, craft, admin, etc.).
- Support site acquisition of equipment, supply, and

Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

Current to Proposed Emergency Plan Comparison Analysis

logistic resources.

[CEP - I.1.c]

Environmental surveys inside and outside the protected area are performed by Field Monitoring Team members under the direction of the EOF RP Coordinator.

Field monitoring teams are directed to track and evaluate a radioactive plume by monitoring radiation levels and by obtaining and analyzing air samples. Field monitoring surveys and sampling may be performed at pre-identified locations or other geographic locations within the EPZ determined during the event. Samples taken by the offsite monitoring teams will be evaluated further by one of the available laboratory facilities described in Element C.4.

[CEP - M.3]

The Emergency Director will inform the ERO, OROs, and NRC upon exiting the state of emergency and either returning to normal organizational control or entering recovery.

9.2.3 Site Area Emergency Response
Upon the declaration of or escalation to a Site Area
Emergency offsite emergency organizations are
notified in accordance with procedure ER 1.2,
Emergency Plan Activation, or if the EOF is activated,
procedure ER 3.3, Emergency Operations Facility
Operations. The Station emergency response
organization takes the following actions in addition to
those described in Sections 9.2.1 and 9.2.2.

- 1. Offsite monitoring teams will be dispatched from the EOF;
- 2. The Response Manager's staff will notify contracted service organizations, sponsor utilities and other industry resources which will be requested to render assistance, as appropriate;
- 3. State resources will be fully mobilized in accordance with planning arrangements set forth in Massachusetts and New Hampshire State Radiological Emergency Response Plans. Included in these planning arrangements is the activation of the

[CEP - D.3]

- 3. Site Area Emergency
- Initial and follow-up event notification to the OROs and NRC.
- Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.
- The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).
- Implementation of onsite protective actions (refer to Section J).
- If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.
- Offsite precautionary actions may be recommended under certain conditions (as required by site specific OROs).

[Annex – E.2]

Seabrook Station ANS used to alert and notify the

#### Non-RIE

CEP limits command and control and non-delegable functions to the SM and SED.

Current ERO titles and responsibilities documented in Section B of common emergency plan.

Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

Details on the ANS system is in the alert and notification system design report.

State response is contained within the state plans.

Public Alert and Notification System (PANS);

- 4. Station conditions will be continually assessed and protective action recommendations to offsite authorities will be made on the basis of this assessment according to procedure ER 5.4, Protective Action Recommendations. This could involve Station conditions related to the potential for radiological impact prior to the occurrence of actual releases; and
- 5. The Response Manager or designee will close out the event. The Site Emergency Director will either downgrade the classification or escalate it to a General Emergency.

general public within the plume exposure pathway EPZ is described as follows.

The ANS (activated by the OROs) is the primary general public notification system. The ANS is designed to provide an alerting signal throughout the population on an area wide basis throughout the 10-mile EPZ. The OROs, after the alert signal, provide an informational or instructional message to the population via various methods as approved by FEMA.

Seabrook Station is responsible for ensuring the operability of the AN

Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-SBK-145, SBK Alert and Notification System Design Report.

[CEP - M.3]

The Emergency Director will inform the ERO, OROs, and NRC upon exiting the state of emergency and either returning to normal organizational control or entering recovery.

**317.** 9.2.4 General Emergency Response Upon the initial declaration of or escalation to a General Emergency, offsite emergency organizations are notified in accordance with procedure ER 1.2. Emergency Plan Activation, or, if the EOF is activated, procedure ER 3.3, Emergency Operations Facility Operations. The Station emergency response organization will promptly notify offsite authorities of the General Emergency status, informing them of accident conditions and coordinating a continuous flow of accident diagnosis and prognosis information. The Public Alert and Notification System (PANS) will be activated. Offsite authorities will fully activate emergency response resources and implement appropriate protective measures. These measures

may be based on meteorological information,

Station ERO will evaluate Station accident

radiological dose projections or Station indications of

material. The Response Manager and the Seabrook

the potential for significant releases of radioactive

[CEP - D.3]

- 4. General Emergency
- Initial and follow-up event notification to the OROs and NRC.
- Augmentation of the shift ERO by activating the TSC, OSC and EOF if not previously performed.
- The Joint Information System is in operation or Joint Information Center is staffed by NextEra ERO (JIC activation determined in coordination with the offsite agencies).
- Implementation of onsite protective actions (refer to Section J) if not previously performed.
- If a release is occurring, monitoring teams are available for dispatch and offsite dose projections are developed.
- Offsite protective action recommendations are communicated to the OROs and NRC.

[Annex – E.2]

Seabrook Station ANS used to alert and notify the general public within the plume exposure pathway

## Non-RIE

CEP limits command and control and non-delegable functions to the SM and SED.

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Current ERO titles and responsibilities documented in Section B of common emergency plan.

Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

Details on the ANS system is in the alert and notification system design report.

State response is contained within the state plans.

	parameters and advise offsite autactions most app. This would include vs. evacuation. Additional respondention include Response Plan p	thorities of propriate to de advice of nses taken e activation	the type of positive observed on the question in a General of the NRC I	rotective d situation. on of shelter Emergency ncident	EPZ is described as follows.  The ANS (activated by the OROs) is the primary general public notification system. The ANS is designed to provide an alerting signal throughout the population on an area wide basis throughout the 10-mile EPZ. The OROs, after the alert signal, provide an informational or instructional message to the population via various methods as approved by FEMA.  Seabrook Station is responsible for ensuring the operability of the AN  Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-SBK-145, SBK Alert and Notification System Design Report.	
318.	9.3 Emerger Recovery The emergency of Section 5.0 of this to both escalate dependent upon escalation criteria between emerge plant parameters conjunction with Action Levels (E. When the risk podecreasing or half of the emergency approach is used	classification is plan provous or de-escathe severita associated associated and offsite the pre-escaths). The pre-escaths is ceased, y is appropriate in the pre-escath as ceased, y is appropriate is propropriate in the pre-escath as ceased, y is appropriate is propropriate in the pre-escath as ceased, y is appropriate in the pre-escath as ceased.	vides the flex alate the emer alate the emer alate the even be with making will require a radiological tablished Emergency de-escalation or iate. A combinate the emergency alate.	fined in ibility needed rgency level it. De- ig a transition a review of conditions in ergency is clearly n or closeout bination	[CEP – M.3]  Steps will be taken to terminate from the event, either directly or following a transition period (prior to entering a state of recovery operations). Usually, the Unusual Event and Alert classification levels will be directly terminated (no entry into recovery).	Non-RIE  Detailed information contained in EAL TBD.  No added, removed or altered commitments or change of intent.
319.		owed A s s	Closeout via Termination Yes Yes Yes No	Closeout via Recovery No No No Yes; may occur after downgrading Yes; may occur after		Non-RIE Table removed as steps are outlined in Section M of the common emergency plan and information contained in EAL TBD.

	downgrading		
320. 321.	After the emergency has been terminated, efforts will be focused on restoring the Station to a normal operating condition. If this is not possible, long-term decommissioning, dismantling, storage and disposal issues will be addressed.  General planning guidance for recovery from	[CEP – M.2] The recovery activities would be managed much like a normal outage, except that certain activities unique to the post-accident situation may be controlled by the recovery organization. The recovery organization would function as a matrix management organization to coordinate activities with the normal company organization. This organization may be located at the EOF or the site, as appropriate.  [CEP – M.3]	Editorial  No added, removed or altered commitments or change of intent.  Non-RIE
	emergency conditions, including reentry into affected areas of the Station, is contained in emergency response procedure ER 6.0. Termination of the emergency phase and initiation of the recovery phase will require satisfying the following criteria appropriate to the emergency condition:  1. Radiation levels of in-Station areas are stable or are decreasing with time;  2. The reactor is shut down and criticality controls are in effect (only if reactor shutdown was required by the emergency condition);  3. The core is being adequately cooled;  4. Control has been established over containment pressure and temperature;  5. An adequate heat transfer path to an ultimate heat sink has been established;  6. Primary system pressure is under control;  7. Any fire, flooding, earthquake or similar initiating events are either under control or have ceased;  8. Releases of radioactive material to the environment are either under control or have ceased;  9. Specified corrective emergency actions have been completed and the Station is in the appropriate operating mode, and notifications are complete.	Steps will be taken to terminate from the event, either directly or following a transition period (prior to entering a state of recovery operations). Usually, the Unusual Event and Alert classification levels will be directly terminated (no entry into recovery). Items that must be considered before terminating the emergency condition to either a normal or a recovery organization are as follows:  • Emergency Action Level criteria  • Releases of radioactive materials to the environment  • In-plant radiation levels  • Plant stable and long term core cooling available  • Containment integrity  • Functionality and integrity of plant systems, facilities, power supplies, equipment, and instrumentation  • Fire, flood, earthquake or similar hazardous emergency conditions  • Security issues  • Site access not limited for personnel and support services  Decisions to relax protective actions for the public will be made by the appropriate state authorities.  When transition from an emergency to a recovery phase is necessary, the Emergency Director will designate a Recovery Manager and develop a recovery organization.	Recovery considerations updated consistent with industry practice.
322.	When transitioning to a recovery phase, the		Non-RIE

	Response Manager and the Site Emergency Director		The CEP and Annexes are
	shall perform the following actions:		formatted in a 50.47(b) outline.
	1. Confer with key ERO managers to determine		Wording altered to address the
	whether actual/potential conditions warrant entry into		level of detail of the NUREG-0654
	a recovery mode.		R2 element and fleet description.
	2. If recovery is appropriate, direct key ERO		Specific recovery requirements
	managers to confer with their respective staffs and		contained in common emergency
	determine whether any radiological and/or operational		plan Section M,
	conditions exist which would preclude entry into a		Recovery instructions removed
	recovery mode.		(procedure level content).
	3. Direct key ERO managers to develop a		(procedure lever content).
	recovery organization and shift schedule. The		
	organizational structure will take into account incident		
	specifics and availability of outside support		
	organizations.		
	4. Direct key recovery organization members to		
	prepare written prioritized recovery work plans in		
	accordance with the guidance in emergency		
	response procedure ER 6.0.		
	5. Submit the recovery organization and action		
	plans to the Site Vice President (Recovery Manager)		
	for approval.		
323.	Prior to declaring recovery in effect, the Response		Non-RIE
020.	Manager shall perform the following actions:		The CEP and Annexes are
	1. Review the proposed recovery organization,		formatted in a 50.47(b) outline.
	action plans, and the date and time for entry into the		Wording altered to address the
	recovery mode with the following:		level of detail of the NUREG-0654
	a. NRC personnel		R2 element and fleet description.
	b. Other federal representatives (e.g., DHS,		Specific recovery requirements
	DOE, EPA)		contained in common emergency
	c. State emergency response officials.		plan Section M,
	2. Brief key ERO managers on the recovery		•
	organization, action plans, and date and time for entry		Recovery instructions removed
	into recovery mode.		(procedure level content).
	3. Direct the Emergency News Manager to		
	issue a news release concerning entry into the		
	recovery mode.		
	4. Provide recovery assistance to State		
	authorities, as requested.		
	5. Direct the administrative, financial and legal		
	support necessary for the recovery organization.		
	When the Site Emergency Director determines that	[CEP - M.2]	Editorial

The recovery activities would be managed much like recovery prerequisites have been met and the No added, removed or altered Response Manager declares recovery in effect, the a normal outage, except that certain activities unique commitments or change of intent. Site Vice President becomes the Recovery Manager to the post-accident situation may be controlled by and assumes overall management of Seabrook the recovery organization. The recovery organization Station recovery activities. The Response Manager would function as a matrix management organization will announce through ERO organizational and to coordinate activities with the normal company organization. This organization may be located at the communication channels when recovery has been EOF or the site, as appropriate. entered. During the recovery transition phase, the Recovery Manager will designate a Response The primary positions in the recovery organization are Manager position holder as the EOF Recovery described as follows: Coordinator who will remain in charge of recovery • Recovery Manager - Overall management of activities designated for the EOF and who will report recovery activities. High level coordination with offsite to the Recovery Manager. Recovery activities agencies. performed at the EOF will be consistent with the • Onsite Recovery Coordinator - Directs the onsite principle of minimizing the offsite impact on station recovery activities. recovery operations. These activities may include • Offsite Recovery Coordinator - Directs interface media relations, financial and insurance related with offsite agencies during the recovery. activities, and maintenance of long-term Radiological Assessment Coordinator (if needed) – governmental and regulatory affairs. The Recovery Coordinates radiological and environmental Manager will determine when to phase out EOF assessment with offsite agencies. Coordinates offsite support activities. This would normally be done upon radwaste management and decontamination completion of any required clean-up activities outside activities. of the owner-controlled area. The Recovery Manager • Spokesperson – Directs the public information will designate a senior plant management position program during the recovery phase. holder as the Onsite Recovery Coordinator who will [CEP - M.3] be in charge of recovery activities directed at When transition from an emergency to a recovery restoring the plant, to the extent possible, to prephase is necessary, the Emergency Director will emergency conditions. The onsite recovery designate a Recovery Manager and develop a organization will originate in the TSC and will recovery organization. subsequently operate from a site facility designated The Emergency Director will inform the ERO, OROs, by the Recovery Manager. The Recovery Manager and NRC upon exiting the state of emergency and will report to the Chief Nuclear Officer who will remain either returning to normal organizational control or responsible for overall nuclear plant safety. The Chief entering recovery. Nuclear Officer will coordinate corporate support activities and resources with site recovery operations. Figure 9.1 Method of Notification and Reporting Non-RIE Instructions for Onsite Personnel Removed figure. Notification process described in Section E of common emergency plan and site annex. Section 10.0, Emergency Measures

326. 10.1 Radiological Accident Assessment Systems and Techniques

The two monitored effluent pathways for accidental releases of radioactive material at Seabrook Station are the plant vent stack and the main steam lines (through the lifting of the safety relief valves or the throttling of the atmospheric steam dump valves). Each of these effluent pathways contains a monitor. The monitor responses can be correlated to the effluent radioactivity concentration. In addition to these monitored pathways, high-range containment area monitors are capable of measuring the exposure rate within the containment, which can be correlated to the radioactivity concentration within the structure. Each of the above systems may be considered as separate release pathways which can be assessed with its associated monitor. Containment leakage is also considered as a possible effluent pathway for dose assessment.

[CEP-I.1.a]

The magnitude of a release of radioactive material to the environment is primarily identified directly by effluent monitors. Survey and sample analysis may also be used to determine the magnitude of a release. Indirect means such as core damage estimates and release pathway assumptions may be used to estimate the magnitude of a release of radioactive material.

The isotopic composition of a release of radioactive material to the environment may be determined by; (1) effluent gaseous monitors, (2) survey and sample analysis, or (3) source term estimates based on core damage and release pathway assumptions.

Dose assessment model methods are capable of estimating source term and magnitude of gaseous releases from effluent monitors or plant parameter data and release rate projections.

Non-RIE

Non-RIE

Details regarding the Radiological Accident Assessment Systems are contained in the UFSAR No added, removed or altered commitments or change of intent

[CEP – I.3]

The ERO monitors plant parameters using information provided by plant data transmittal systems to assess the status of reactor fuel using core damage assessment procedures.

The ERO monitors plant data systems to evaluate the status of containment integrity, systems used to mitigate the release of radioactive material to the environment and to identify leakage of radioactive material from plant systems, structures, and components.

Effluent and process monitors are used to determine the onset and duration of an actual or potential release of radioactive material to the environment. [CEP – I.4]

Source term present in reactor coolant, containment atmosphere, and spent fuel pool area atmosphere are estimated using effluent, process and area radiation monitor readings, comparison of plant conditions against design basis event scenarios, sample analysis and environmental survey results, and plant parameter indications as inputs into the dose

Details regarding the containment monitoring system is contained in the UFSAR

The containment monitoring system consists of redundant ionization chambers and instrumentation channels with a range of 100 to 108 R/hr (gamma). The system is Class 1E qualified. A time-dependent conversion factor has been calculated which will enable conversion of the monitor's response (R/hr) to the total noble gas concentration (µCi/cc) in the containment building at a given time after shutdown assuming that the concentration within the containment is uniform. This conversion factor is calculated based on the assumption that a core equilibrium mixture of fission products exists at t=0. It should be noted, however, that the intent of this system is not to correlate this monitor response to core conditions or damage but to estimate the concentration in the containment building. The only relationship that can be readily made from this monitor to core conditions is a minimum core damage level since the amount of diluted or undiluted primary coolant leakage into the containment building may be a major unknown variable. If available, the minimum core damage level indicated by this monitor will be used as an indication of the type of fission product

	mixture being released through the effluent pathways.	assessment and core damage assessment processes.	
328.	The Wide Range Gas Monitor (WRGM) is used to continuously monitor the gaseous activity released to the environment through the plant vent stack. Its monitoring range is large enough to encompass low level releases using a beta scintillation detector with a range of 4.0E-8 to 1.0E-1 μCi/cc and two mid to high range solid-state beta/gamma detectors of 7.0E-5 to 1.0E+3 μCi/cc and 2.0E-2 to 1.0E+5 μCi/cc, respectively. The WRGM was designed and installed to minimize personnel exposure while obtaining particulate and iodine grab samples. The WRGM also calculates a release activity in μCi/sec in the range of 1.0E+2 to 1.0E+14 μCi/sec.	processes.	Non-RIE Details regarding the WRGM is contained in the UFSAR
329. 330.	A backup monitor is available in the event of a WRGM failure. This monitor consists of an ionization chamber type detector, viewing a prescribed geometrical container in which the stack exit gas flows. The detector and associated remote universal digital rate meter are capable of monitoring dose rates from 0.1 mR/hr to 10,000 R/hr.  The main steam line monitors consist of a G-M		Non-RIE Details regarding the WRGM is contained in the UFSAR  Non-RIE
	detector placed adjacent to each of the four (4) main steam lines (several inches) with remote readout modules. This monitor response (mR/hr) is used to estimate offsite doses.		Details regarding the main steam line monitors is contained in the UFSAR
331.	10.1.1 Estimation of Offsite Dose Rates Seabrook Station maintains a computerized dose projection system, utilized in the Control Room, TSC and EOF, which is capable of providing real time and forecast offsite dose estimates for actual meteorological and radiological accident conditions. The system is referred to as Raddose-V. Raddose-V uses a variable trajectory, puff advection model of dispersion to predict the position of the radioactive plume. A ground level plume is modeled. The model uses a finite cloud technique to estimate external exposure received from the plume, while the standard concentration $\chi/Q$ methodology is used to estimate doses received from inhalation of radioisotopes and external exposure over a four day	[CEP – I.1.b]  NextEra uses site specific versions of the Unified RASCAL Interface (URI) off-site dose projection computer model. The underlying dose assessment model in URI is the NRC RASCAL 4 model, based on the methods and equations documented in NUREG-1940.  The URI model provides off-site radiological dose and dose rate estimates based on near real time or hypothetical inputs. Projected dose is based on EPA-400-R92-001 dose conversion factors and provided as; (1) the total effective dose equivalent, or TEDE (the sum of the effective dose equivalent from immersion, 4 days of ground deposition, and the committed effective dose equivalent from inhalation),	Non-RIE URI is a verified dose projection model use throughout the industry and NRC.

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period from material deposited on the ground. In addition, the model incorporates routines for computing deposition, as well as the current dose rate from radioactive material deposited on the ground, out to 50 miles.

The Raddose-V calculation considers source term and plume decay, as well as the effects of wet and dry deposition of iodines and particulates. The model also includes predefined protective action recommendations to alert users of the program to any exceedances of the EPA-400 Protective Action Guides (PAGs). The EPA-400 PAGs used are 1 Rem TEDE and 5 Rem CDE-Thyroid.

The six main tasks of the Raddose-V program are:

- 1. Determine the source term (release rates) of airborne radioactive material, based on current, plant-specific accident data.
- 2. Model the atmospheric transport and diffusion of the released material, based current, local meteorological conditions.
- 3. To calculate TEDE, estimate the sum of exposure from the plume, inhalation of radioisotopes, and four day exposure from material deposited on the ground.
- 4. Calculate committed dose equivalent (CDE) to the thyroid.
- 5. Estimate integrated deposition of radioactive material and corresponding dose rates from deposited material.
- 6. Provide dose and deposition results for both real-time and forecast periods.

Raddose-V performs all calculations in discrete 15-minute "advection time steps'. The model allows up to 200 advection steps (50 hours) to be modeled. The model requires relevant meteorological and radiological information for each time step. The program data input screens allow for direct entry of Main Plant Computer

System (MPCS) meteorological and radiological parameters, or the user can enter this data manually. Raddose-V then calculates plume position, and dose and deposition information, for each step, according

and (2) the committed dose equivalent to the thyroid (CDE thyroid).

URI dose projection results are given for various locations from the site boundary to 10 miles. URI is capable of providing dose assessment results for multiple release points from the site.

URI dose projection results and field monitoring readings are used in assessing radiological EALs and PARs.

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	to the meteorological and radiological data entered.		
	New real-time calculations are conducted every 15		
	minutes, based on the new position of the plume at		
	the end of the 15 minute advection step.		
	Once calculations are completed, users of the		
	program are given the opportunity to print results		
	following each 15 minute step.		
	For each time step, Raddose-V calculates dose rates		
	and integrated doses at 80 radial-grid positions within		
	the Plume Exposure Pathway Emergency Planning		
	Zone (EPZ). Results are also provided at 77		
	predetermined receptor locations. Maximum dose		
	rates by distance, based on plume position at the end		
	of each advection time step, are calculated for each		
	reporting location. The model also has the ability to		
	calculate dose rates at any user-defined receptor		
	location by entering the position's distance and		
	bearing from the plant.		
	Further, the model calculates ground deposition at		
	the 144 radial-grid receptors in the		
	50 mile Ingestion Pathway EPZ. These receptor		
	locations include the same locations for which dose		
	rates and doses are calculated in the Plume		
	Exposure Pathway EPZ, plus receptors located at 20,		
	30, 40 and 50 miles at each of the sixteen (16)		
	compass directions. TEDE and CDE-Thyroid doses		
	are also given out to 50 miles.		
	Raddose-V also provides the ability to project doses		
	(using a standard 4-hour default release duration) for		
	the present incident without affecting the calculation		
	results of real-time doses. Forecast results are based		
	on "avoided" dose consistent with EPA-400		
	philosophy. Output reports available for real-time		
	dose assessment are also available for the forecast		
	calculations.		
332.	10.1.2 Evaluation of Field Environmental Samples	[CEP - I.1.c]	Editorial
	When Seabrook Station monitoring teams have	Environmental surveys inside and outside the	No added, removed or altered
	determined the approximate plume centerline (i.e.,	protected area are performed by Field Monitoring	commitments or change of intent.
	maximum radiation level) in the field, they will take air	Team members under the direction of the EOF RP	3
	samples at various intervals downwind from the	Coordinator.	
	station. These samples will be analyzed on a gross	Field monitoring teams are directed to track and	
	(beta, gamma) basis in the field and, if elevated levels	evaluate a radioactive plume by monitoring radiation	

	are observed, returned to the EOF. At the EOF they will be referred to an appropriate laboratory facility to be analyzed to determine radionuclide concentrations.	levels and by obtaining and analyzing air samples. Field monitoring surveys and sampling may be performed at pre-identified locations or other geographic locations within the EPZ determined during the event. Samples taken by the offsite monitoring teams will be evaluated further by one of the available laboratory facilities described in Element C.4.	
333.	Particular attention will be directed to observed iodine concentrations. The air samples will be analyzed in a two-step process. The first step involves a field analysis of the sample which measures the gross radioactivity collected on the silver zeolite cartridge and filter paper samples using a Pancake G-M detector. Field monitoring instrumentation can detect and measure radioidine concentration in the air as low as 10-7 Ci/cc. If the sample analysis shows a relatively high amount of radioactivity, a second analysis will be performed at an appropriate laboratory facility. The sample will be delivered to a laboratory facility for gamma spectroscopic analysis with greater sensitivity. Procedure ER 5.2, Site Perimeter and Offsite Monitoring and Environmental Sampling, also describes air sampling methods. Projected thyroid committed dose equivalent (CDE) will be determined from measured I-131 concentrations by multiplying by an estimate of the duration of the exposure and a dose conversion factor.	[CEP – I.7]  NextEra field monitoring equipment has the capability to detect and measure airborne radioiodine concentrations as low as 1E-7 µCi/cc in the presence of noble gases. Air samples will be taken with portable air sampling equipped with a Silver Zeolite or equivalent cartridge and particulate filter. Interference from the presence of noble gas and background radiation is minimized by ensuring that monitoring teams move to areas of low background prior to analyzing the sample cartridge.  Air sample results can be estimated in the field through the use of portable monitors. The samples can be subsequently analyzed for greater precision by the laboratory facilities described in Element C.4.	Editorial Removed details on performing air samples. Sampling details are controlled by RP. No added, removed or altered commitments or change of intent.
334.	In addition to the measurement and evaluation of offsite direct dose rates and air samples for radioiodine, the offsite radiological impact assessment will include the identification of all principal radionuclides potentially released from the accident in all potentially significant exposure pathways. This will be accomplished through an offsite monitoring and sampling program in which environmental samples of media (water, air, soil, etc., as appropriate) will be collected and subjected to detailed radionuclide analysis. This analysis can be performed by the GEL Laboratories, Charleston, South Carolina. The radionuclide results of any such	[CEP – H.13] The site radiological laboratory is the primary location for receipt of field monitoring team samples. The EOF RP Coordinator is responsible for direction and coordination of field monitoring sample analyses, and for assessing the radiological data obtained from the Field Monitoring Teams.  Sampling and analysis equipment are available (see Element C.4) for quantitative activity determination of liquid and air samples, and qualitative activity determination of terrestrial samples.  [Annex – C.4]	Editorial No added, removed or altered commitments or change of intent.

	analysis would be interpreted in terms of radiation exposure to the public by the use of the comprehensive dose calculation programs available at the EOF. The results of environmental sample analyses will be evaluated in relation to US Environmental Protection Agency dose guidelines for relocation and to the US Food and Drug Administration (FDA) derived intervention levels for the radionuclides identified in FDA guidance for limiting consumption of radioactively contaminated foods.	The station's main chemistry lab is the primary location equipped for chemical and radiological analysis.  Additionally, GEL Laboratories, Charleston, South Carolina, is available on a continuous 24 hour, seven days a week basis to provide a full spectrum of radio-analytical measurements on environmental sample media.  GEL Laboratories is capable of providing on a continuous basis a full spectrum of radio-analysis of environmental samples which includes identification of principal accident radio-nuclides and their evaluation against EPA dose guidelines for relocation and FDA derived intervention levels associated with consumption of contaminated foods.	
335.	10.1.3 Evaluation of Post Accident Samples When an emergency condition results in core damage, an in-station (e.g., containment) source term that could be subsequently released, or a release, station emergency response personnel will obtain and analyze various post accident samples. Potential sampling points include containment atmosphere, gas spaces in other plant areas, and the plant vent stack. Per the Seabrook Station Post Accident Assessment Program, archive samples of the reactor coolant system and containment sump can also be obtained and analyzed. Source-term components, including radioiodine, would be quantified and evaluated in terms of actual or potential impact.	[CEP – I.4.a] Each NextEra site has arrangements to obtain and analyze highly radioactive samples from the reactor coolant system, containment atmosphere and sump, and spent fuel pool. Site specific arrangements to obtain and analyze highly radioactive samples are described in the site annexes. [Annex – I.4.a] When an emergency condition results in core damage, an in-station (e.g., containment) source term that could be subsequently released, or a release, station emergency response personnel will obtain and analyze various post accident samples. Potential sampling points include containment atmosphere, gas spaces in other plant areas, and the plant vent stack. Per the Seabrook Station Post Accident Assessment Program, archive samples of the reactor coolant system and containment sump can also be obtained and analyzed. Source-term components, including radioiodine, would be quantified and evaluated in terms of actual or potential impact.	No Change
336.	10.1.4 Severe Accident Management Guidance Guidance for responding to severe accident conditions has been established and appropriate improvements have been implemented in accordance	· · ·	Non-RIE SAMs controlled by program outside of the Emergency Plan.

with Chapter 5 of NEI 91-04, Revision 1, Severe Accident Issue Closure Guidelines. Appropriate Severe Accident Management (SAM) references have been incorporated into applicable Seabrook Station emergency response (SSER) procedures. Severe accident management training requirements for TSC personnel are documented in the Emergency Preparedness Training Program Description. The Operations Training Department tracks SAM Implementor Training for Operations personnel.

337. 10.2 Protective Action Recommendation Criteria Seabrook Station will issue protective action recommendations (PARs) based on the emergency class and several factors which vary with each emergency class. No protective actions will be recommended at the Unusual Event or Alert emergency classes. At a Site Area Emergency, PARs for beach areas may be issued based on the time of year and selected plant status indicators. At a General Emergency, PARs will be issued based on selected plant status indicators, dose projections and field monitoring results.

[CEP - J.6]

NextEra sites have developed PARs, in accordance with agreements made with the state agencies, for the plume exposure pathway EPZ that include evacuation, sheltering, and recommendations for radioprotective Potassium lodide use based on the following:

- NUREG-0654/FEMA-REP-1, Supplement 3, Guidance for Protective Action Strategies, November 2011
- EPA-400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, May 1992
- Guidance for Industry, KI in Radiation Emergencies, Questions and Answers, FDA, December 2002
- Potassium Iodide as a Thyroidal Blocking Agent in Radiation Emergencies, FDA Guidance, November 2011

PARs for the general public will be based on plant conditions and/or offsite dose assessment results. PARs beyond the 10-mile EPZ will be developed on an "ad hoc basis" from projected or measured dose in excess of EPA PAGs. Because dose projection accuracy is limited by distance, actual field measurements are used to corroborate projections before issuing PARs in areas outside the 10-mile EPZ.

The PAR strategy basis document is referenced in the site annexes.

### Non-RIE

Details on PARs contained within the SBK Protective Action Recommendation Technical Basis Manual.

No added, removed or altered commitments or change of intent.

		[A	
		[Annex – J.6] The Seabrook Station site specific basis adaptation of	
		NUREG-0654 Supplement 3 PARs is documented in	
		EP-SBK-144, SBK Protective Action	
		Recommendation Technical Basis Manual.	
338.	Protective action recommendations have been	[CEP – J.7]	Editorial
	developed using the guidance of NUREG-0654,	NextEra offsite protective action recommendation	No added, removed or altered
	Supplement 3, which provides an acceptable method	strategies, informed by the ETE report, have been	commitments or change of intent.
	to comply with 10CFR50, Appendix E, Section IV,	developed using guidance provided in NUREG-	
	paragraph 3 in the use of evacuation time estimates	0654/FEMA-REP-1, Supplement 3, Guidance for	
	in the formulation of PARs for the plume exposure	Protective Action Strategies, in coordination with the	
	pathway emergency planning zone, and provides guidance for meeting planning standard	state and local agencies	
	10CFR50.47(b)(10) in the development of a range of		
	protective actions.		
	The protective action recommendations have been		
	coordinated with responsible State of New Hampshire		
	and Commonwealth of Massachusetts authorities.		
339.	For a General Emergency, other than a General		Non-RIE
000.	Emergency based on a Hostile Action, Seabrook		Details on PARs contained within
	Station will at a minimum recommend (1) evacuation		the SBK Protective Action
	of towns within 2 miles of the Station, (2) evacuation		Recommendation Technical Basis
	of towns 5 miles downwind of the Station, (3)		Manual.
	sheltering of the remaining towns within the EPZ, (4)		
	evacuation of Hampton and Seabrook Beaches and		
	(5) closure of Massachusetts beach areas. For a		
	General Emergency based on a Hostile Action, the		
	initial PAR will be to shelter for all EPZ towns. PARs		
	may be expanded based on further assessments of		
	plant and radiological conditions.		
340.	For accidents that result in airborne radioactivity	[CEP – I.6]	Editorial
	releases, projected dose and dose rate estimates at	NextEra sites use an industry recognized dose	No added, removed or altered
	the site boundary and distances out to 10 miles will be issued to those offsite authorities responsible for	assessment model to make timely assessments of	commitments or change of intent.
	protective action decision making. Based on offsite	the actual or potential magnitude and locations of any	
	field monitoring results and dose projections,	radiological hazards through gaseous release	
	Seabrook Station will recommend protective actions	pathways. Personnel qualified in dose assessment	
	in accordance with the criteria set forth in the EPA	are available on shift, remotely, and in the EOF. Dose assessment results and field monitoring readings	
	Protective Action Guidelines, Table 10.1.	assist in evaluating appropriate ECLs based on	
	Seabrook Station will also perform ingestion pathway	radiological EALs, and for developing any related	
	sampling and analysis, and assist offsite authorities in	PARs.	
	determining protective actions for the ingestion	1740.	

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	exposure pathway Emergency Planning Zone.	The actual or potential magnitude of liquid radiological releases with regard to the ECLs are determined by liquid effluent monitors, direct area surveys, or sample analyses.  With regard to the ingestion pathway, field monitoring teams are used to obtain liquid effluent samples from radioactive liquid releases. Sample results are used in conjunction with Offsite Dose Calculation Manual (ODCM) methods to estimate potential ingestion exposure in support of EAL determination. Also, liquid release monitoring activities are coordinated and sample results shared with ORO agency personnel to assist their determination in intermediate phase protective actions.	
341.	10.3 Radiological Exposure Control During a Station emergency, abnormally high levels of radiation and/or radioactivity may be encountered. These levels may range from slightly above those experienced during normal station operation to life-endangering levels of several hundred rem in a short period of time. Under all situations, whether it is immediate action to regain control of the emergency or for life-saving purposes, measures will be taken to minimize personnel doses from external and/or internal sources of radiation.	[CEP – Planning Standard K] Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Worker and Lifesaving Activity Protective Action Guides.  [CEP – K.1] Approval is required if emergency workers are expected to receive dose in excess of 10 CFR 20 occupational dose limits. ALARA practices are utilized during emergencies as much as practical.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Previous general content aligned with planning standard element.
342.	Specific dose guidelines for entry or re-entry into areas in order to (1) remove injured persons, and (2) undertake corrective actions, are defined in Table 10.2 of the plan. The Site Emergency Director will authorize, with Health Physics Coordinator or Radiological Controls Coordinator concurrence, emergency dose guidelines consistent with these or more restrictive guidelines dependent upon emergency conditions. The Radiological Controls Coordinator will discuss the hazards involved in rescue procedures with the members of the response team prior to undertaking any health-threatening mission.  Considerations to be made prior to allowing personnel to accept risks associated with rescue	[CEP – K.1] Approval is required if emergency workers are expected to receive dose in excess of 10 CFR 20 occupational dose limits. ALARA practices are utilized during emergencies as much as practical. [CEP – K.1.a] Onsite exposure guidelines for emergency workers, consistent with EPA 400-R-92-001, Manual of Protective Action Guides and Protective Actions for Nuclear Incidents, U.S. Environmental Protection Agency, May 1992, Table 2-2, "Guidance on Dose Limits for Workers Performing Emergency Services," have been established as follows:    TEDE Limit (Rem)   Activity     5   All activities during the emergency.	Editorial No added, removed or altered commitments or change of intent.

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operations are defined in Table 10.2, Emergency Dose Limits.

Dose to individuals providing other emergency functions will be consistent with the limits specified in Table 10.2 with every attempt being made to keep personnel dose as low as reasonably achievable (ALARA).

10	Protecting valuable property when lower dose is not practicable.
25	Lifesaving or protection of large populations when lower dose is not practical per EPA 400 R 92 001.
Greater Than 25	Lifesaving or protection of large populations, only if individuals receiving exposure is a volunteer, and fully aware of risks involved.

#### NOTES

- Emergency exposure limits are exclusive of current occupational exposure.
- Only one emergency exposure is allowed per lifetime.
- Dose to lens of the eye is limited to three times listed value.
- Dose to other organs, including skin and body extremities, is limited to ten times listed value.

alternate, is responsible for maintaining the emergency radiological protection programs developed for station staff and support personnel. A supply of self-reading dosimeters will be stored at the Health Physics Control Point for distribution and assignment to the Technical Support Center. An emergency tote of self-reading dosimeters is stored at the EOF to ensure immediate deployment of offsite monitoring teams with dosimetry and to support entry of offsite personnel to the site. Self-reading dosimetry readers and program software have been added to the EOF inventory to ensure dosimetry activation.

# [CEP - B.1.a]

- H. TSC Radiation Protection Coordinator
- Facility/Group Management and Supervision
- Contact and Use of External Support Services
- Event Classification
- State and Local Event Notification
- ERF Communications
- · Facility Activation
- Facility Operation
- Backup and Alternative Facilities
- · Accident Detection and Assessment
- Effluent Release and Dose Assessment
- · OSC Team Priorities, Dispatch and Control
- Site Evacuation
- · ERO Radiological Protection
- Offsite Protective Action Recommendations
- Emergency Exposure
- Contamination Control Measures
- Decontamination
- Recovery
- I. Security Liaison
- Organizational Interface and Coordination
- Use of Medical, Fire and Law Enforcement Support
- NRC Notification and Communications

# Non-RIE

ERO function and task hierarchy updated consistent with current NRC and industry guidance.

Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.

Self-reading dosimetry readers and program software added to the EOF inventory is maintained in accordance with the emergency preparedness facility inventory document.

344.	Each emergency response organization member reporting to the site will be provided a Dosimeter of Legal Record (DLR) badge and a self-reading dosimeter. Dose records based upon the results of these dosimeters will be maintained at each center. This information will be	Backup and Alternative Facilities OSC Team Priorities, Dispatch and Control Site Assembly and Accountability Site Evacuation [CEP – K.1.b] Emergency worker exposure is monitored at the time of exposure by the use of electronic dosimeters. If direct measurement of airborne concentrations is not available at time of exposure, workers will be provided respiratory protection, when feasible, and total exposures will be calculated after the fact using follow up survey data and whole body counting equipment.  [CEP – K.1.c] Personnel dosimeters are issued to and worn by NextEra radiation worker qualified personnel who may be required to work in Radiological Controlled Areas in accordance with radiation protection procedures.  Radiation protection personnel in the OSC and TSC have the responsibility to monitor and assess the radiation doses received by ERO personnel on a 24-hour per day basis throughout a declared event.  Personnel dose records are documented and managed using a computerized system. Should this system not be readily accessible or available, personnel dose is manually recorded.	Editorial No added, removed or altered commitments or change of intent.
345.	cross-referenced with and replaced by DLR badge data when available. Should the station exhaust its supply of DLR badges, the station DLR vendor, Mirion Technologies (GDS) will supply DLR badges. Offsite authorities responding onsite will be provided dosimetry.	[CEP – K.1.c] Dosimeters are available and will be provided to offsite agency responders if they are required to enter a Radiological Controlled Area or are expected to receive a dose in excess of 100 mRem for the event.	Editorial  No added, removed or altered commitments or change of intent
346.	10.4 Protective Measures 10.4.1 Personnel Accountability The determination of station personnel accountability is facilitated by the use of a computer-assisted accountability system. The goal of this system is to generate an initial list of missing individuals within 30 minutes of the declaration of an Alert or higher emergency classification level.	[CEP – J.4] The emergency alarm, together with the public address system, is used to alert and notify on-site personnel of the need for assembly at a Site Area or General Emergency classification level (or earlier at the discretion of the Emergency Director). ERO personnel report to their assigned emergency response facility.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. Specific accountability requirements contained in common emergency

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Upon declaration of an emergency and activation of station emergency alarms, station personnel assigned specific emergency responsibilities will proceed to their designated emergency center location. If an Alert or higher emergency classification level is declared, non-assigned personnel (e.g., station visitors, contractor and other station personnel) will return their dosimetry to the designated normal storage racks, if appropriate, and leave the protected area through the Guard Island. There, non-assigned personnel will receive instructions concerning station egress measures. Security will generate computer reports of personnel entering and evacuating through Guard Island. All emergency response personnel reporting to emergency centers will log in on card readers and accountability rosters associated with each center. Station security personnel will be responsible for reviewing computer results and reporting these results to the Security Shift Supervisor who, in turn, will make the final determination of station personnel accountability and report the results to the STED or Site Emergency Director. Search and rescue procedures will be implemented if any persons have been identified as missing.

Typically, accountability of personnel inside the Protected Area is completed within 30 minutes of event declaration. Following a hostile action event, the personnel accountability process is initiated following containment or cessation of the threat. Missing individual(s) will be identified by Security. Appropriate actions will be taken to locate missing individual(s). When necessary, search and rescue team(s) will be dispatched to locate and, if necessary, rescue missing individual(s).

After initially completed, accountability will be maintained continuously throughout the emergency for personnel inside the Protected Area.

plan Section J. Accountability instructions removed (procedure level content).

347. 10.4.2 Station Access/Egress Control Methods
Under all Station emergency conditions, public
address announcements, made by control room
personnel, will provide emergency notification and
instruction to those personnel within the Protected
Area. Individuals in the balance of the ownercontrolled area will be alerted by an onsite siren.
Visitors or those in transit within the owner-controlled
area will be advised by the most appropriate means.
The complete warning and advisement process will
be accomplished in a rapid manner to ensure
personnel safety.

# [CEP - J.1]

NextEra maintains procedures to provide for a range of protective actions for all areas controlled by the site. Protective actions have been developed for radiological incidents and to protect personnel during hostile actions directed at the site.

Sitewide notifications and announcements are routinely made using the Public Address (PA) system. Personnel on site are notified of a declared emergency through the PA system.

Visitors within the Protected Area are escorted by badged individuals. The escort is responsible for controlling and directing their assigned visitors regarding actions required by any announcements and alarms.

Security personnel are used, as available, to augment PA announcements and to check OCA areas for

### **Editorial**

No added, removed or altered commitments or change of intent.

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348.	When an Alert, Site Area Emergency or a General Emergency has been declared, all non-assigned station personnel will be directed to proceed to either the remote monitoring area for monitoring and decontamination or directly home (except during outages when the station is in Mode 5 or 6 – see Chapter 3, section 3.2). Unless directed otherwise, non-assigned personnel will use their personal vehicles to leave the site.	remaining individuals.  [CEP – J.1.a]  Site evacuation is required following a Site Area Emergency or General Emergency unless delayed due to safety issues. The sounding of an alarm over the public address system occurs for the initiation of site evacuation.  When a site evacuation occurs, ERO and other essential personnel respond to their designated response facilities/areas. Non-essential personnel inside the Protected Area typically exit to the OCA by following normal RP and Security processes and proceed to a designated assembly area. Further evacuation of non-essential personnel inside the OCA occurs as warranted for the particular site.  A process is in place to perform a rapid evacuation of the Protected Area without onsite monitoring and OCA assembly if conditions warrant. Monitoring in this instance is performed at an offsite location.	Editorial  No added, removed or altered commitments or change of intent.
349.	In the event that station conditions may produce or have produced a release, traffic control measures will be established to direct unassigned personnel off site via the most appropriate exit (the North Access Road or the South Access Road). The Security Shift Supervisor will be informed by the Short Term Emergency Director or by the Site Emergency Director which access road to use for site evacuation traffic in order to minimize the potential for radiation exposure or contamination by radioactive material.	[CEP – J.2] Designated offsite locations for site evacuees, and the process to use them, have been identified through coordination with local emergency management personnel. The site evacuation process takes into consideration meteorological and radiological data, weather and other travel hazards. On-site personnel will evacuate the site when directed. Site evacuation routes and evacuation locations are contained in the site annexes. [Annex – J.2] Upon being released, station evacuees will be advised of area evacuation routes by security. Site evacuation routes are noted in Figure J.2-1 SBK Evacuation Routes, used to depart from the site, and evacuation routes identified in the ETE. [CEP – J.3] Personnel evacuating are monitored for contamination, and, if possible and necessary, decontaminated before leaving the site. If conditions	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. Specific site evacuation requirements contained in common emergency plan Section J. Site evacuation instructions removed (procedure level content).

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		do not allow for decontamination of personnel on-site, they will be directed to designated offsite reception center(s) for radiological monitoring and decontamination, if required.	
350.	If a radioactive release has occurred which might result in the contamination of Station evacuees, personnel trained in contamination monitoring techniques will proceed to the remote monitoring area to perform contamination monitoring of evacuated vehicles and personnel. All evacuating personnel will be instructed to report to the remote monitoring area to be surveyed for contamination levels. If contamination is detected, actions will be implemented that appropriately correspond to the type and degree of contamination and that are consistent with the priorities of the emergency actions and conditions underway.	[Annex – J.2] If a radioactive release has occurred which might result in the contamination of Station evacuees, personnel trained in contamination monitoring techniques will proceed to the remote monitoring area to perform contamination monitoring of evacuated vehicles and personnel. All evacuating personnel will be instructed to report to the remote monitoring area to be surveyed for contamination levels. If contamination is detected, actions will be implemented that appropriately correspond to the type and degree of contamination and that are consistent with the priorities of the emergency actions and conditions underway.  Remote Monitoring Area (RMA), shown in Figure J.2-2, Remote Monitoring Area Layout, is located at the Security Firing Range on Rocks Road is designated for site evacuees, and the process to use them, have been identified.	No Change
351.	The Health Physics Coordinator will contact the Radiological Assistant at the EOF and report Remote Monitoring Area contamination survey results. Appropriate personnel and vehicle decontamination techniques will be used as necessary.		Non-RIE Specific RMA requirements contained in site annex Section J. Site evacuation instructions removed (procedure level content).
352.	Upon being released, station evacuees will be advised of area evacuation routes by security. Site evacuation routes are noted in Figure 10.2, Seabrook Station Evacuation Routes. Appendix C provides evacuation time estimates of the public within the plume exposure pathway EPZ and also summarizes the major evacuation routes which will be utilized if necessary.	[Annex – J.2] Upon being released, station evacuees will be advised of area evacuation routes by security. Site evacuation routes are noted in Figure J.2-1 SBK Evacuation Routes, used to depart from the site, and evacuation from the 10-mile EPZ will be by way of evacuation routes identified in the ETE. [Annex – J.8.a] The Seabrook Station site specific ETE report is documented in EP-SBK-143, SBK Evacuation Time Estimate Study.	Non-RIE Figure J.2-1 located within annex. Appendix C removed. ETE incorporated by reference. No added, removed or altered commitments or change of intent.
353.	The Security Coordinator will make arrangements for station badging necessary to support incoming		Non-RIE

	L All:		100
	emergency response personnel. All incoming		Site evacuation instructions
	responders will be directed to report to the EOF		removed (procedure level content).
	where they will be briefed and provided with the		
	necessary equipment.		
	10.4.3 Protective Measures for Hostile Action Based		Non-RIE
l E	Events		HABE instructions removed
	Operations Department Abnormal Operating		(procedure level content).
F	Procedures (AOPs) contain specific instructions for		(
(	onsite personnel within the Protected Area for hostile		
E	action based events. The AOPs are referenced in		
1	Appendix G, Section VII. The content of the		
	instructions are specific to land based or airborne		
	events. The protective measures prescribed by the		
	AOPs conform to the requirements of 10 CFR 50		
	Appendix E, Section IV, 1.		
	10.4.4 Decontamination Capability	[CEP – K.1.e]	Non-RIE
	Station decontamination facilities are located in the		
1	Operational Support Center, specifically at the	Personnel decontamination is performed using	Decontamination capability details
	Radiologically Controlled Area HP Control Point. The	normal radiation protection procedures in on-site	contained within station procedures.
	RCA shower is available for personnel	facilities. Personnel decontamination facility locations	No added, removed or altered
		are described in the site annexes.	commitments or change of intent.
	decontamination purposes. Soap, brushes, etc., are available to aid in decontamination efforts. Survey	Contamination on personnel will be removed in	
		accordance with established radiation protection	
	instrumentation for personnel monitoring is available	procedures.	
	here. If necessary, internal contamination can be	Equipment will be released for use outside of the	
	assessed with the use of whole body count	contaminated areas only when radioactive	
	equipment (FASTSCAN) or its backup. All waste	contamination is within acceptable limits. All	
	generated through the use of the decontamination	equipment must be checked for contamination before	
	facilities is collected and processed by the station	being taken from a known contaminated area.	
	iquid radwaste system.	Equipment and material decontamination is	
		performed using normal radiation protection	
		procedures.	
		[CEP – H.2]	
		Dosimetry (dose of legal record and self-reading	
		capable of monitoring emergency radiation	
		exposure), respiratory protection, radiation survey	
		equipment, and RWPs are available to OSC	
		personnel. In the event of a personnel contamination,	
		decontamination will be performed in the area	
		normally designated for this purpose.	
	Decontamination capability exists at the EOF and at	[Annex – J.2]	Non-RIE
I It	the remote monitoring area. At the remote monitoring	Remote Monitoring Area (RMA), shown in Figure J.2-	The CEP and Annexes are

area, initial decontamination methods will involve the use mild soap and water in conjunction with a soft brush. All radwaste generated as a result of this procedure will be disposed of by normal radwaste procedures. All personnel with detectable skin contamination will be detained for decontamination purposes; otherwise, they will be released. Radiation Protection Department procedures for personnel surveys and decontamination techniques prescribe progressive techniques for skin decontamination, including techniques applicable to removal of radioiodine contamination. The procedures and supplies for implementing them are maintained at the EOF and remote monitoring area. At both locations, personnel decontamination can be accomplished with the use of a shower station, with wash water collected into a tank and pumped to 55-gallon drums that shall be transferred for processing onsite. If required, vehicle decontamination will be accomplished via dry decontamination methods.

2, Remote Monitoring Area Layout, is located at the Security Firing Range on Rocks Road is designated for site evacuees, and the process to use them, have been identified.

formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. Specific decontamination requirements contained in common emergency plan Section J. Decontamination instructions removed (procedure level content).

**357.** 10.4.5 Use of Onsite Protective Equipment and Supplies

The station supplies of personnel radiation protection equipment will be used as necessary to support the emergency response effort. Respiratory protection equipment, protective clothing, and potassium iodide will be assigned to the onsite emergency response organization members in accordance with Procedure ER 4.3. Radiation Protection During Emergency Conditions. Respiratory protection qualifications for personnel assigned to OSC positions, Offsite Monitoring Team positions, On-shift Electricians, Onshift Mechanics, and On-shift I&C Technicians will be tracked by Emergency Preparedness. Respiratory protection qualifications for Plant Engineering engineers who could be assigned to corrective action teams will be tracked by Plant Engineering. Radiological monitoring equipment will be stocked and available for use at established emergency centers. Seabrook Station documents containing detailed lists of dedicated equipment available to support radiological emergency response efforts are

[CEP – J.5]

Protective equipment and supplies are available to personnel remaining on site or arriving on site during the emergency to minimize the effects of radiological exposures or contamination in accordance with radiation protection procedures. Protective measures include the following:

- 1. Individual Respiratory Protection
  Respiratory protection equipment is used by qualified personnel when called for by exposure control procedures. The radiological use respiratory protection program is maintained by RP.
  Self-contained breathing apparatus is used in areas that are deficient in oxygen or when fighting fires.
  Self-contained breathing apparatus are available with other firefighting equipment for use by the site fire brigade.
- 2. Individual Thyroid Protection
  Efforts are made to utilize respiratory protective
  equipment to minimize ingestion and/or inhalation of
  radionuclides and to maintain internal exposure below

# Non-RIE

Onsite Protective Equipment details contained within station procedures. No added, removed or altered commitments or change of intent. Appendix F removed maintained in accordance with the emergency preparedness facility inventory document.

	referenced in Appendix F.	However, if an empotential ingestion Potassium lodide available for distri The administration NextEra and venomitigate the conseduring an emerge of radioprotective procedures.  3. Protective Protective clothing	n of potassium iodide (KI) to dor personnel may be used to equences of inhalation of radioiodine ncy. The process for administration drugs is described in implementing	
358.	10.4.6 Radiation Guideline Action Levels Radiation guideline action levels for emergency center habitability are shown on Tables 10.1 and 10.3. These tables describe the actions of station staff in response to a range of station radiological conditions.	of unknown radiat and environmenta appropriate monit equipment. Refer to Element and their exposure [CEP – K-1.a] Onsite exposure gonsistent with EFProtective Action Nuclear Incidents Agency, May 199	patched into radiation areas or areas tion levels are briefed on the task al conditions and are provided oring and personnel protective  K.1.a for the description of activities e thresholds and considerations.  Guidelines for emergency workers, PA 400-R-92-001, Manual of Guides and Protective Actions for , U.S. Environmental Protection 2, Table 2-2, "Guidance on Dose Performing Emergency Services," shed as follows:  Activity  All activities during the emergency.  Protecting valuable property when lower dose is not practicable.  Lifesaving or protection of large populations when lower dose is not practical per EPA 400 R 92 001.  Lifesaving or protection of large populations, only if individuals receiving exposure is a volunteer, and fully aware of risks involved.	Table removed. RP limits and response to rad conditions are contained in RP procedures.  No added, removed or altered commitments or change of intent.

359.	10.5 Aid to Affected Personnel 10.5.1 Medical Treatment Station medical facilities are provided in the first aid station located in proximity to the Radiologically Controlled Area HP Control Point. Seabrook Station also maintains a site medical office located in the Operations Support Building. The first aid station and medical office are equipped and supplied to implement the requirements of the Medical Program. (Protected: Ref. NRC IR 85-32[10]) Specific station personnel have been trained as Emergency Medical Technicians (EMTs). One Emergency Medical Technician, supplemented by at least one additional individual trained in first aid and	<ul> <li>NOTES</li> <li>Emergency exposure limits are exclusive of current occupational exposure.</li> <li>Only one emergency exposure is allowed per lifetime.</li> <li>Dose to lens of the eye is limited to three times listed value.</li> <li>Dose to other organs, including skin and body extremities, is limited to ten times listed value.</li> <li>[CEP – L.2.a]</li> <li>On-shift first aid personnel will provide first aid to individuals who are injured. Radiation protection personnel will provide contamination control support to potentially contaminated injured personnel.</li> <li>NextEra maintains first aid supplies, and equipment for the treatment of injured or contaminated injured persons. Descriptions of equipment and supplies, and radiological monitoring and decontamination equipment and supplies are in site procedures.</li> <li>[CEP – O.1]</li> <li>7. First Aid – Personnel assigned as first aid responders maintain qualifications equivalent to Red</li> </ul>	Editorial No added, removed or altered commitments or change of intent.  Potential RIE 6-2 Refer to assessment Section 3.2 for the disposition of this item.
	cardio-pulmonary resuscitation, will be on site at any one time to provide 24-hour emergency response coverage.	Cross Standard First Aid techniques.	
	10.5.2 Medical Transportation Arrangements have been made with Exeter Hospital to provide care for contaminated injured patients. In addition, Wentworth-Douglass Hospital located in Dover, NH, will provide care for these individuals on a backup basis. Both hospitals participate in medical emergency drills as a portion of emergency plan training.	[Annex – L.2.b] The primary and backup offsite medical facilities to treat contaminated, injured personnel from Seabrook Station are: Primary – The Exeter Hospital, Inc. – Exeter Hospital will provide medical assistance to Seabrook Station personnel. The agreement provides for the treatment of personnel who may be considered to have substantial radiation related injuries, or who may have been exposed to and contaminated by radioactive materials.  Backup – Wentworth-Douglass Hospital in Dover, NH may be utilized if the treatment required extend beyond the capacity of the Exeter Hospital.	Editorial No added, removed or altered commitments or change of intent.
362.	The Seabrook Fire Department ambulance will be	[Annex - L.4]	No Change

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363.	used for medical transportation of injured and contaminated personnel. The ambulance is capable of radio communications with the hospital while en route with a patient. (Protected: Ref. NRC IR 85-32[12])  Ambulance personnel are provided with specific training by Seabrook Station staff on the radiation protection considerations associated with radiologically contaminated personnel.	The Seabrook Fire Department ambulance will be used for medical transportation of injured and contaminated personnel. The ambulance is capable of radio communications with the hospital while en route with a patient.  [CEP – O.1.a]  NextEra offers emergency response training annually to local support organizations. Training includes basic radiation protection, the notification process for their organization, and their organization's expected role. The offered training for local support organizations who will enter the site also includes the general site layout, site access procedures, and the identity (by position and title) of the onsite individual who will control their support activities.	Non-RIE  Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.
364.	Table 10.1 EPA Protective Action Guidelines		Non-RIE Table removed.
365.	Table 10.2 Emergency Dose Limits		Editorial Table removed contained in the common emergency plan Section K.
366.	Table 10.3 Emergency Center Protection		Non-RIE Table removed.
367.	Figure 10.1 Emergency Center Protection		Non-RIE Table removed.
368.	Figure 10.2 Seabrook Station Evacuation Routes	Figure J.2-1 SBK Evacuation Routes	Editorial Figure J.2-1 located within annex.
	Section 11.0, Notification and Public Information		
369.	11.1 Emergency Notification Upon classification of accident conditions at the Station, the Short Term Emergency Director ensures that the New Hampshire State Police and Massachusetts Emergency Management Agency are notified. This notification is initiated within 15 minutes of emergency classification and is the initial link to the offsite governmental emergency network for the activation of offsite emergency response plans, including emergency public notification if the emergency condition warrants it. The format and contents of the initial message between the Station	[CEP - B.1.a] 1. Control Room (CR) A. Shift Manager • State and Local Event Notification [CEP - E.1] 2. ORO Event Notification NextEra, in cooperation with the OROs, has established mutually agreeable content, methods and procedures for notification of OROs. When an ECL is initially declared, or upgraded, or changes are made to PARs, a notification to the OROs is made within 15	Editorial No added, removed or altered commitments or change of intent.

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	and the offsite warning point dispatchers are specified		
	in notification procedures that are reviewed and	[Annex – E.1]	
	agreed upon by state authorities.	2. ORO Notification	
		The following state 24/7 warning points are notified of	
		a declared emergency at Seabrook Station:	
		New Hampshire State Police (NHSP)	
		Communications Center Dispatcher	
		Massachusetts Emergency Management Agency	
		(MEMA) 24-hour Dispatcher	
		[CEP – E.3]	
		NextEra sites and OROs have established the	
		content of the initial notification message to be used	
		during an emergency. Minimum content of the initial	
		notification will include the following:	
		• The site's name	
		• Time of event	
		• The ECL	
		Protective Action Recommendation (PAR)	
		Whether a release is taking place	
		In conjunction with OROs, NextEra sites have	
		established the content of the follow-up messages,	
		which will include additional information regarding	
		event conditions and response actions.	
370.	Having been notified through State channels, the	[CEP – E.1.a]	Non-RIE
	Massachusetts Department of Public Health and the	The provisions for notification of response	State response is contained within
	New Hampshire Division of Public Health Services		the state plans.
	will call Seabrook Station and request the following	Notifications to OROs include a means of verification	No added, removed or altered
	information:	or authentication within the automated system or by	commitments or change of intent.
	Verification of the information provided during	providing call back verification phone numbers.	3
	initial notifications	[CEP – E.5]	
	<ul> <li>A brief description of events and any</li> </ul>	ORO procedures provide for initial and follow-up	
	prognosis	messages to the public including instructions for	
	When requested, additional follow-up information will	protective actions, if required. NextEra will assist with	
	be provided to State agencies. This information	establishment appropriate instructions and message	
	includes	content when requested by the ORO.	
	prevailing weather conditions (e.g., wind	Contont whom requested by the Orto.	
	velocity, direction, atmospheric stability, precipitation,		
	etc.),		
	<ul> <li>release magnitude, duration and impact,</li> </ul>		
	actual or projected dose rates at the Station		
	boundary; projected dose rates at various distances		
<u> </u>	· · · · · · · · · · · · · · · · · · ·		

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	from the Station (2, 5, and 10 miles), and emergency response actions underway.		
371.	Follow-up reports will be provided to the state personnel when requested.	[CEP – E.5] ORO procedures provide for initial and follow-up messages to the public including instructions for protective actions, if required. NextEra will assist with establishment appropriate instructions and message content when requested by the ORO.	Editorial  No added, removed or altered commitments or change of intent.
372.	11.2 Public Notification Public alerting and notification within the Seabrook Station plume exposure pathway EPZ will be accomplished through the use of the equipment and systems described in Appendix E.	[Annex – E.2] Seabrook Station ANS used to alert and notify the general public within the plume exposure pathway EPZ is described as follows. The ANS (activated by the OROs) is the primary general public notification system. The ANS is designed to provide an alerting signal throughout the population on an area wide basis throughout the 10-mile EPZ. The OROs, after the alert signal, provide an informational or instructional message to the population via various methods as approved by FEMA. Seabrook Station is responsible for ensuring the operability of the ANS Detailed information on the FEMA approved system used to alert and notify the general public is maintained in EP-SBK-145, SBK Alert and Notification System Design Report.	Non-RIE Appendix E removed. PANS incorporated by reference Details on the ANS system is in the alert and notification system design report. State response is contained within the state plans.
373.	11.3 Public Information Any emergency will generate a continuous and intensive demand for up-to-date public information. This is best accomplished if each organization involved is aware of what the others are saying. Consequently, Seabrook Station has planned for the establishment of a Joint Information Center for the purpose of providing coordinated dissemination of information to the media.	CEP – H.5] A near-site JIC (outside the 10 mile EPZ) is established for each site. ERO staffing of the JIC is concurrent with other ERFs, although facility activation is coordinated with the joint offsite agencies and has no time requirement.	Editorial  No added, removed or altered commitments or change of intent.
374.	At an Unusual Event declaration, the Seabrook Station News Service staff will coordinate public information inquiries in accordance with Procedure ER 3.4, Seabrook Station News Services Operations. However, under an Alert, Site Area Emergency or General Emergency, the Joint Information Center, co-	[CEP – G.2]  NextEra Corporate Communications and business unit personnel maintain programs and processes for the coordination and dissemination of information to the public and media using JIS concepts. Specifically, the process provides a structure and system for	Non-RIE ERO function and task hierarchy updated consistent with current NRC and industry guidance. Refer to Analysis #1 and Analysis #2 for a detailed comparison

located with the EOF in Portsmouth, New Hampshire, developing and delivering coordinated interagency evaluation of the ERO positions, messages; developing, recommending, and will be activated. It will be staffed and operated by functions/tasks, and response time designated public information personnel from executing public information plans and strategies; commitments of the CEP. advising decision makers concerning public affairs Seabrook Station in accordance with Procedure ER 3.5. Joint Information Center Operations, Personnel issues that could affect a response effort; and with nuclear expertise will be responsible for media controlling rumors and inaccurate information that contact and interfacing with public information could undermine public confidence in the emergency representatives for the States of New Hampshire and response effort. Massachusetts, the NRC and other Federal agencies. Physical locations for interacting with the media are JIC support will also be supplied by NextEra maintained at the corporate headquarters and locally Corporate Communications, based out of Florida. The near each site. Specific site locations are described in Corporate JIC Manager and Emergency the site annexes Element H.5. Communications Team (ECT) will work together with [Annex – H.5] the JIC personnel located at the EOF. The Corporate The Joint Information Center (JIC) is co-located with JIC team will provide support remotely or travel to the the EOF in Portsmouth, New Hampshire. JIC, dependent on the severity of the emergency. The Corporate JIC Manager and the Emergency Non-RIE [CEP - G.3] News Manager from Seabrook Station will manage ERO function and task hierarchy A spokesperson is designated as the primary point of the Joint Information Center and coordinate Joint updated consistent with current contact for NextEra and is responsible for the NRC and industry guidance. Information Center activities with representatives from consistency of the information released by the utility. state and federal agencies at the Joint Information The spokesperson may select individuals to address Refer to Analysis #1 and Analysis Center. The Emergency News Manager will be the public on behalf of NextEra as their respective #2 for a detailed comparison supported by technical advisors and other Joint expertise is needed. This position is not designated evaluation of the ERO positions, Information Center support staff. The Joint as an ERO position. functions/tasks, and response time Information Center Technical Advisor will obtain [CEP - G.4] commitments of the CEP. emergency information in the EOF and communicate Arrangements are made for the exchange of this information to the Emergency News Manager and information among the designated spokespersons the Corporate JIC Manager. The Emergency News that use various means and technologies as agreed Manager and the Corporate JIC Manager will upon by the particular agencies. NextEra will provide designate support staff to draft news statements, to information and updates to the ORO and federal staff record approved information on public and public information officers (PIOs) to address the media information telephone lines, to monitor news emergency, including plant conditions and associated media broadcasts, and to assist news media response actions. representatives present in the Joint Information OROs address public response and actions in Center briefing area. The Emergency News Manager accordance with their respective plans. and/or the Corporate JIC Manager will coordinate joint news conferences conducted by utility, state and federal personnel at the Joint Information Center. The Corporate JIC Manager and the Emergency [CEP - G.3] Non-RIE News Manager are the primary spokespeople for the ERO function and task hierarchy A spokesperson is designated as the primary point of Seabrook Station ERO at the Joint Information updated consistent with current contact for NextEra and is responsible for the NRC and industry guidance. Center. A senior company official, designated in consistency of the information released by the utility.

	accordance with Seabrook Station Communications policies, may support the Emergency News Manager and/or Corporate JIC Manager as a spokesperson for the company.	The spokesperson may select individuals to address the public on behalf of NextEra as their respective expertise is needed. This position is not designated as an ERO position.	Refer to Analysis #1 and Analysis #2 for a detailed comparison evaluation of the ERO positions, functions/tasks, and response time commitments of the CEP.
	State and federal public information personnel are provided work space and communications equipment in the Joint Information Center. Emergency information obtained from the Seabrook Station EOF and the State Emergency Operations Centers will be coordinated by utility and state personnel at the Joint Information Center. Public inquiries will be dealt with by rumor control personnel who staff designated toll-free telephone lines at the New Hampshire and the Massachusetts Emergency Operations Centers. Utility and state staff at the Joint Information Center will coordinate addressing rumor trends identified by state rumor control personnel and utility media monitoring personnel.	[CEP – H.5] A near-site JIC (outside the 10 mile EPZ) is established for each site. ERO staffing of the JIC is concurrent with other ERFs, although facility activation is coordinated with the joint offsite agencies and has no time requirement.  When activated the JIC functions as a physical location for interacting with the media and for coordination between NextEra, federal and ORO PIOs regarding communications information to the public and the media.  NextEra provides space and equipment at their corporate facility to provide coordination of public information response activities with site and corporate JIS/JIC personnel.  [CEP – G.4]  Arrangements are made for the exchange of information among the designated spokespersons that use various means and technologies as agreed upon by the particular agencies. NextEra will provide information and updates to the ORO and federal public information officers (PIOs) to address the emergency, including plant conditions and associated response actions.  OROs address public response and actions in accordance with their respective plans.	Ro added, removed or altered commitments or change of intent.
378.	Public information materials are available at the Joint Information Center. The materials include information on radiation, Seabrook Station operations, the Seabrook Station emergency planning zone, the emergency classification system, and other general emergency plan information.	[CEP – G.5] The news media will be provided materials to acquaint them with emergency planning effort at the NextEra specific site(s) annually. Typical content includes site information, information concerning radiation, emergency planning, and points of contact for release of information to the media during an emergency.	Editorial No added, removed or altered commitments or change of intent.
379.	Communications staff provide public information materials to the general public upon request.	CEP – G.1]	Non-RIE Public Information material

		NextEra, in coordination with OROs, updates and distributes site related emergency planning information annually to residents living within the plume-exposure pathway emergency planning zone (EPZ). Information disseminated to the public is in the form of printed or electronic materials. Public information for the transient population is also provided.	distribution in corporate and station procedures.
	Public information materials specific to emergency plans of New Hampshire and Massachusetts have been developed. The materials have been distributed to residents and made available to transients in New Hampshire and Massachusetts who are located within the plume exposure pathway Emergency Planning Zone (EPZ). Materials distributed include the following:  Resident population: emergency information and special needs survey cards are distributed yearly to plume exposure pathway EPZ households.  Beach/Transient population: signs posted at beaches, parks and state forest recreation areas  Commercial establishments (restaurants, businesses, health care facilities, etc.) and schools: emergency information.  Farmers, farm workers, food processors and food distributors: a brochure containing information on protection of the food chain. This brochure is made available to farmers and food processors within the ingestion exposure pathway EPZ.  These materials contain facts about the emergency plans, information on potential protective actions (such as sheltering and evacuation), listings of EAS radio stations, emergency bus routes and evacuation routes, considerations for school children and persons with special needs, names and locations of reception centers and host facilities, contacts for additional information and educational material on radiation.	[CEP – G.1]  NextEra, in coordination with OROs, updates and distributes site related emergency planning information annually to residents living within the plume-exposure pathway emergency planning zone (EPZ). Information disseminated to the public is in the form of printed or electronic materials. Public information for the transient population is also provided.  Annual distribution of safety information which contains educational information on emergency preparedness, sheltering, ANS, radiation, and telephone numbers of agencies to contact for more information.  Information for residents with special needs and non-English translations is incorporated per current federal guidance.	Non-RIE Public Information material content in corporate and station procedures and are consistent with current NRC and industry guidance.
381.	In addition to the printed emergency plan public		Non-RIE
	information materials, the states have developed broadcast messages consistent with Seabrook Station's emergency classification and protective		State response is contained within the state plans.

382.	action recommendation schemes. The messages are intended to be used as part of the Emergency Alert System to provide information to the public when needed.  Communications personnel are in contact with local and regional media, respond to media inquiries, and annually coordinate a program to acquaint the news media with information concerning radiation, emergency public information procedures, general Station characteristics, the emergency classification system and other pertinent facts.	[CEP – G.5] The news media will be provided materials to acquaint them with emergency planning effort at the NextEra specific site(s) annually. Typical content includes site information, information concerning radiation, emergency planning, and points of contact for release of information to the media during an emergency.	Editorial  No added, removed or altered commitments or change of intent.
	Section 12.0, Maintaining Emergency Preparedness		
383.	Emergency exercises and drills shall be conducted to test and evaluate the adequacy of emergency facilities, equipment, procedures, communication channels, actions of emergency response personnel, and coordination between Seabrook Station and offsite agencies. A summary of exercises and drills, and associated elements are presented below. As used for emergency preparedness drills and exercises, "annual" means that the event shall be conducted once within a calendar year. For "semi-annual," the event shall be conducted once within the first 6 calendar months of a year and once again within the second 6 calendar months. "Biennial" means the event will be conducted within a two-year period.	[CEP – N.1]  1. Exercise: An exercise is an event that tests the integrated capability and a major portion of the elements of the emergency plans and organizations.  • Over the period of the exercise cycle, exercises will test the adequacy of timing and content of implementing procedures and methods, test emergency equipment and communications networks, test the public alert and notification system, and ensure that emergency organization personnel are familiar with their duties.  • Exercises must provide the opportunity for the ERO to demonstrate proficiency in the key skills necessary to implement the principal functional areas (see N.4) of emergency response.  • State and local agencies within the plume exposure pathway EPZ are provided the opportunity to participate by invitation as described in Element N.2.a.  [CEP - Appendix 1]  Annual: For drills and exercise periodicity, annual is once per calendar year. For training and qualification periodicity and work products, annual is every 12 months not to exceed 15 months.	Editorial No added, removed or altered commitments or change of intent.
384.	12.1.1 Radiological Emergency Plan Exercises	[CEP - N.2.a]	Editorial
	An exercise tests the execution of the overall Station emergency response and its integration with responding offsite organizations. In order to test and	Each NextEra site will conduct a plume exposure pathway exercise biennially. Specifically, the plume exposure pathway exercise is developed to provide	No added, removed or altered commitments or change of intent.

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385.	evaluate the Station emergency response, an exercise shall be conducted every two years. Consistent with the regulatory requirements for offsite exercise participation, Federal, State and local agencies shall be notified of intended exercises and their conduct shall be coordinated with offsite authorities as appropriate.	the ERO with the opportunity to demonstrate proficiency in the principal functional areas of emergency response:  • Management and coordination of emergency response  • Accident assessment  • Event classification  • Notification of the OROs  • Assessment of the onsite and offsite impact of radiological release  • PAR development (required only in exercises that include a GE)  • Protective action decision-making (onsite protective actions)  • Plant system repair and mitigative action implementation  OROs will be invited to participate in plume exposure pathway exercises. If an ORO chooses not to participate, their participation is not required and it should be documented that they were given the opportunity to participate.  [CEP – N.1]	Editorial
	A drill is a supervised instruction period aimed at testing, developing and maintaining skills in a particular emergency response function. The frequency of drills is dependent upon the function to be tested.	<ul> <li>2. Drill: A drill is aimed at testing, developing and maintaining skills in one or more emergency plan functions.</li> <li>Drill types may be operational or discussion-based events (e.g., single ERF or tabletop drills). Drills may be a component of an exercise.</li> <li>During drills; activation of all of the ERFs is not required, supervised instruction is permitted, participants may be given the opportunity to resolve problems (success paths), and focus may be primarily on onsite training objectives. Drills may include evaluation of specific performance objectives or be conducted for non-evaluated training only.</li> </ul>	No added, removed or altered commitments or change of intent.
386.	Combined Functional Drills     To ensure that adequate emergency response capabilities are maintained during the interval between biennial exercises, at least one annual drill will be conducted involving a combination of some of the principal functional areas of the onsite emergency	<ul> <li>[CEP – N.1]</li> <li>2. Drill: A drill is aimed at testing, developing and maintaining skills in one or more emergency plan functions.</li> <li>Drill types may be operational or discussion-based events (e.g., single ERF or tabletop drills). Drills may</li> </ul>	Editorial  No added, removed or altered commitments or change of intent.

response capabilities. The principal functional areas of emergency response include activities such as management and coordination of emergency response, accident assessment, protective action decision making, and plant system repair and corrective actions. Activation of all of the emergency response facilities will not be necessary during these drills. State and local governments within the plume exposure pathway EPZ may participate in these drills at their request.

be a component of an exercise.

• During drills; activation of all of the ERFs is not required, supervised instruction is permitted, participants may be given the opportunity to resolve problems (success paths), and focus may be primarily on onsite training objectives. Drills may include evaluation of specific performance objectives or be conducted for non-evaluated training only.

**387.** 2. Communication Drills

To ensure that emergency communications equipment is operable, communication drills shall be conducted as outlined below. Included in the scope of these drills is the aspect of understanding message content. Paragraphs c, d, and g below may be performed as part of annual combined functional drills and the required biennial exercise.

- a. Communication channels with State governments within the plume exposure pathway shall be tested monthly;
- b. The pager system for the notification of the Primary Responders of the Emergency Response Organization (ERO) shall be tested weekly;
- c. Data transmission capability between Station emergency centers shall be tested annually;
- d. EOF communications to State Emergency Operation Centers and to Station field assessment teams shall be conducted annually:
- e. Communications between the Control Room and the NRC Headquarters Operations Center shall be tested weekly or as otherwise directed by the NRC:
- f. Communications between the EOF, TSC and the NRC Headquarters Operations Center shall be tested monthly or as otherwise directed by the NRC; and
- g. Notification of the Secondary Responders of the ERO via the automated telephone notification service shall be tested at least annually.

[CEP - N.4.f]

Each NextEra site will conduct communications drills once per calendar year.

Communications tests described in Element F.3 can be performed as drills provided they include the aspect of understanding the content of messages. [CEP – F.1.c]

NextEra sites use an automated ERO notification system to notify ERO members of a declared emergency. Multiple redundancies are incorporated such that activation of the system can be performed by computer or from any phone system, and operation can take place from more than one location.

[CEP - F.3]

Communication systems testing is accomplished in accordance with Table F-1.

Table F-1: Communication System Testing Requirements

Communication System	Testing Requirement
ORO Notification System	Monthly (a)
NRC FTS (ENS) Network	Monthly (b)
ERDS	Verify Transmission Quarterly
ERO Notification System	Per Elements N.4.h and N.4.i
Field Monitoring Teams Communication	Annually (a)
Telephone System	Frequent Use (c)
Station Radio System	Frequent Use (c)
Station PA System	Frequent Use (c)
ANS	per site specific ANS Design Report
(a) Test credit may be	given by successful use in a

# Potential RIE 6-3

Refer to assessment Section 3.3 for the disposition of this item.

388.	3. Fire Drills To evaluate the response and training of the Station fire brigade and coordination of same with offsite fire support, a number of fire drills are conducted annually. The Town of Seabrook Fire Department shall be requested to participate in at least one drill annually. The drills shall be conducted in accordance with the Seabrook Station Fire Protection Manual (SSFP).	drill.  (b) NRC ENS in the Control Room is Frequent Use. TSC and EOF require monthly testing.  (c) Communication systems that are listed with a testing frequency of "Frequent Use" indicate that the associated equipment is normally used at a sufficient high regularity, such that separate additional testing is not needed.  [CEP – N.4.i]  The NextEra ERO notification is an all-call process. Each NextEra site will conduct an off-hours unannounced ERO call-in drill biennially to verify each minimum staffing ERO position meets the required Table B-1 response time.  The scope of the off-hours unannounced ERO call-in drill will require collection of the ERO notification system report which documents response within the required time.  Completion of an Element N.4.h off-hours unannounced ERO report-in drill satisfies the requirements of the off-hours unannounced ERO call-in drill in this element.  The Off-Hours Call-In Drill requirement may be satisfied by an actual event provided the objectives are evaluated and documented in a critique report.	Editorial Fire drills are conducted in accordance with the fire protection program.
389.	4. Medical Drills To evaluate the response and training of the Station medical response and offsite hospital personnel, a medical drill shall be conducted annually involving a simulated contaminated individual. Although the Station medical response may be tested more frequently, the offsite response portion of medical	[CEP – N.4.a] Each NextEra site will conduct an onsite simulated medical drill once per calendar year. The scope of the emergency medical drill will include a simulated on-site injured and contaminated individual and medical/ first aid treatment, including contamination control.	Potential RIE 6-4 Refer to assessment Section 3.4 for the disposition of this item.

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	drills may be performed as part of the biennial exercise.	Emergency Medical Drill offsite participation and periodicity for support Hospital and Ambulance services are performed in accordance with the 42 CFR 482.15 regulations and are not included in the scope of the station medical drills.	
390.	5. Radiological Monitoring Drills Plant environs and radiological monitoring drills (onsite and offsite) shall be conducted annually. These drills shall include collection and analysis of airborne sample media, communications, recordkeeping and, if feasible, interface with other offsite monitoring efforts. In addition, a drill will be conducted on the collection of other sample media (e.g., soil, water and vegetation). Radiological monitoring drills may be performed as part of a training activity, another drill or the biennial exercise.	[CEP - N.4.d] Each NextEra site will conduct an environmental monitoring drill once per calendar year. The scope of the environmental monitoring drill will include performance objectives for direct radiation measurements in the environment, collection and analysis of sample media (e.g., water, vegetation, soil, and air), communications, and record keeping.	Editorial No added, removed or altered commitments or change of intent.
391.	6. Health Physics Drills Health Physics drills shall be conducted semiannually which involve response to, and analysis of, simulated elevated airborne and liquid samples and direct radiation measurements. These drills may be performed as part of a training activity, another drill or the biennial exercise. Additionally, Chemistry personnel shall be drilled annually on obtaining and analyzing post-accident samples.	[Annex – N.4.g] Post-Accident Sampling Drills will be conducted annually. These drills will address capabilities including analysis of liquid and containment atmosphere samples with simulated elevated radiation levels.	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description.
392.	12.1.3 Drill and Exercise Scenarios The Emergency Preparedness Manager is responsible for coordinating preparation for and implementation of drills and exercises with the exception of fire and medical emergency drills. Operations Support staff are responsible for coordinating preparation for and implementation of fire and medical emergency drills. For exercises that include offsite participation, the scenario shall be submitted to FEMA for agency review in accordance with regulatory guidance. All exercise scenarios shall be submitted to the NRC prior to implementation.	[CEP – N.2.a] OROs will be invited to participate in plume exposure pathway exercises. If an ORO chooses not to participate, their participation is not required and it should be documented that they were given the opportunity to participate. Biennial plume exposure pathway exercise scenarios are submitted to the NRC under 10 CFR 50.4 at least 60 days before they are held. [CEP – N.3.c.2] FEMA will determine whether a no/minimal radiological release scenario is acceptable for use in a full or partial participation biennial exercise.	Non-RIE Drill and exercise process details are contained in the drill and exercise procedures.
393.	Within an eight-year period (beginning 1/1/2014), drill and exercise scenario content shall be varied to test all the major elements of the emergency	[CEP – Planning Standard N] Element N.3 - During each eight-year exercise cycle, biennial, evaluated exercise scenario content is	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline.

preparedness program. These major elements correspond to the objectives presented in applicable fleet and site procedures. Within an eight-year period, one scenario shall include the states' response within the ingestion pathway EPZ. In general, the scenario shall simulate a sequence of emergency conditions that would call for the mobilization of the offsite authorities, require recommendations of offsite protective measures, and allow for evaluation of offsite plans and their integration with the Station response. The scenario shall include, as a minimum, the following:

- 1. Date, time period, locations and participating organizations;
- 2. Basic objectives and specific elements that are to be tested:
- 3. Guidelines and extent of play;
- Controller instructions, and a list of controllers and evaluators;
- 5. A narrative summary of the exercise scenario and expected responses; and
- Time schedule of real and simulated events.

varied to provide the opportunity to demonstrate the key skills and capabilities necessary to respond to the following scenario elements:

[CEP - N.1]

The ERO (not necessarily each ERO member) shall be provided the opportunity to develop and maintain key emergency response skills within the scope of their duties in drills and exercises during each exercise cycle.

Over the course of an eight-year cycle all unique initiating conditions in the EAL scheme (with the exception of judgment ICs) are made available for the demonstration of event classification within drills or exercises.

[CEP - N.2.b]

NextEra will assist in development and participate as requested in an ingestion exposure pathway exercise to support FEMA evaluation of ORO emergency plan response activities in this area.

The scope, objectives and schedule will be coordinated with appropriate federal emergency organizations and OROs for exercises in which they participate.

Previous general content aligned with planning standard element. Scenario details are contained in the drill and exercise procedures.

Seabrook Station cannot commit other organizations to conduct an exercise during off-hour times. Outside organizations shall be encouraged to participate in exercises, but starting times and pre-notification for exercises have to be agreed upon by participating offsite organizations. Exercises will be conducted in different seasons of the year, to the extent practicable, depending on circumstances such as scheduled refueling outages and exercise schedules for other sites affecting the availability of NRC and FEMA evaluators.

[CEP - N.2.a]

OROs will be invited to participate in plume exposure pathway exercises. If an ORO chooses not to participate, their participation is not required and it should be documented that they were given the opportunity to participate.

Non-RIE

The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description. Specific drill scope and periodicity requirements contained in the common emergency plan Section N.

Scenario development instructions removed (procedure level content).

- The exercise shall be structured with sufficient flexibility to allow free play for decision-making processes. The exercise scenario package shall describe a specific accident sequence, contain a set of input messages, and list anticipated response actions which parallel the accident sequence. The
- [CEP N.1]
- 1. Exercise: An exercise is an event that tests the integrated capability and a major portion of the elements of the emergency plans and organizations.
- Over the period of the exercise cycle, exercises will test the adequacy of timing and content of

# Non-RIE

The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the level of detail of the NUREG-0654

exercise controller organization shall receive implementing procedures and methods, test R2 element and fleet description. instructions to recognize areas where ERO emergency equipment and communications Specific drill scope requirements responses may deviate from anticipated responses. networks, test the public alert and notification system, contained in the common The exercise controller organization may (1) restrict and ensure that emergency organization personnel emergency plan Section N. player action if the response threatens the approved are familiar with their duties. Scenario development instructions time sequence; (2) restrict player action if the Exercises must provide the opportunity for the ERO removed (procedure level content). response circumvents a required exercise objective; to demonstrate proficiency in the key skills necessary to implement the principal functional areas (see N.4) and (3) introduce "free play" items to the scenario sequence if player actions become stagnant. of emergency response. • State and local agencies within the plume exposure pathway EPZ are provided the opportunity to participate by invitation as described in Element N.2.a. Exercise elements which may allow free play in the Non-RIE decision-making process include the following: The CEP and Annexes are 1. Exposure control actions: formatted in a 50.47(b) outline. 2. Manpower augmentation actions: Wording altered to address the Emergency classification actions, particularly level of detail of the NUREG-0654 the de-escalation process; R2 element and fleet description. Recommendation of protective actions: and 4. Specific drill scope requirements 5. Coordination and communication with offsite contained in the common authorities. emergency plan Section N. Scenario development instructions removed (procedure level content). 12.1.4 Evaluation of Exercises 397. [CEP - N.1.a] Non-RIE To evaluate the performance of participating facility Critiques of each drill and exercise will be held The CEP and Annexes are personnel and the adequacy of emergency facilities, following each event to evaluate areas and identify formatted in a 50.47(b) outline. equipment and procedures used during an exercise, issues. The critique is performed following the Wording altered to address the the Exercise Manager shall arrange for qualified conclusion of a drill or exercise using preselected drill level of detail of the NUREG-0654 controllers and evaluators to evaluate and critique the and exercise performance objectives. R2 element and fleet description. exercise. Provisions are made for federal and ORO Specific drill evaluation A critique shall be conducted as soon as feasible representatives to observe and participate in drill and requirements contained in the following the conclusion of the exercise with player exercise critiques when present. common emergency plan Section personnel as designated by the Exercise Manager. A written report is prepared following a critique to N. After the critique, the controllers and evaluators shall document whether the objectives were successfully Scenario evaluation instructions provide drill/exercise-related documentation and demonstrated. removed (procedure level content). performance reports to the Drill/Exercise Manager. A remedial exercise is only required if the emergency The Drill/Exercise Manager shall use this information plan is not satisfactorily tested during the biennial to determine whether, and to what extent. exercise such that NRC, in consultation with FEMA,

cannot (1) find reasonable assurance that adequate

protective measures would be taken during a

drill/exercise objectives were demonstrated.

The exercise documentation shall be submitted to the

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398.	Emergency Preparedness Manager who shall assign responsibility and deadlines for corrective actions. Individuals assigned this responsibility shall be required to document actions taken to improve the Station's emergency preparedness.  12.1.5 Credit for Response to an Actual Emergency Demonstration of exercise or drill objectives scheduled for evaluation in accordance with Fleet EP Drill and Exercise procedures may be satisfied by the effective response and documentation of designated key ERO staff to an actual emergency. Credit will be given for this objective when the following provisions are met in response to an actual emergency.  1. The emergency required a prompt and timely response and mobilization of key ERO staff responsible for the implementation of RERP emergency functions;  2. The emergency resulted in the establishment of communications links among responding organizations;  3. The following documentation, describing the level of response and involvement of key ERO staff to the emergency, is available:  • Type of emergency;  • Period of response;  • Arrival times of responders; Communications logs;  • Emergency decisions made and implemented; Emergency plan resources used; and List of staff involved.  4. The event is evaluated in accordance with Emergency Preparedness Department procedures for Post Event Reviews and Evaluations to determine if the actions taken were appropriate or the response	radiological emergency, or (2) determine that the ERO has maintained key skills specific to emergency response.  [CEP - N.1.c] The off-hours drill requirement may be satisfied by an actual event provided it meets the above off-hours criteria and the objectives are evaluated and documented in a critique report for the augmentation of the ERO, the transfer of responsibilities, and facility activation. [CEP – N.1.d] The unannounced drill requirement may be satisfied by an actual event provided objectives are evaluated and documented in a critique report for the augmentation of the ERO, the transfer of responsibilities, and facility activation. [CEP – N.4.h] The Off-Hours Report-In Drill requirement may be satisfied by an actual event provided objectives are evaluated and documented in a critique report. [CEP – N.4.i] The Off-Hours Call-In Drill requirement may be satisfied by an actual event provided the objectives are evaluated and documented in a critique report.	Non-RIE  The CEP and Annexes are formatted in a 50.47(b) outline.  Wording altered to address the level of detail of the NUREG-0654 R2 element and fleet description Documentation for actual emergency credit details would be contained in event report.  Credit for response to an actual emergency instructions removed (procedure level content).
399.		[CEP – O.1] Initial training and continuing ERO training is conducted to ensure ERO personnel are properly qualified to their specific position. Categories of	Non-RIE The CEP and Annexes are formatted in a 50.47(b) outline. Wording altered to address the

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accordance with the ERO Training Program Description. Changes to this document shall be reviewed to ensure that (1) they do not decrease the effectiveness of the SSREP, the SSER or Seabrook Station emergency response capabilities, and (2) when implemented, the emergency preparedness program will continue to meet the applicable standards of 10 CFR 50.47(b) and the requirements of 10 CFR 50, Appendix E. (Protected: Ref. NRC Inspection Report 50-443/93-03)

Major elements of the program are discussed below. Seabrook Station personnel with specific positions in the ERO shall receive training to initially qualify them for a response position. ERO assignments shall, as much as possible, parallel normal job knowledge, skills and abilities.

Initial training shall consist of an overview course and other courses that are appropriate to the individual's response position. The required initial courses are specified in the ERO Training Program Description. Selected ERO members shall receive annual requalification training to maintain their level of emergency response knowledge. The required requalification training courses are also specified in the ERO Training Program Description. Re-qualification training courses are conducted throughout the year. The ERO Training Program Description contains a generic annual schedule which is used to ensure that |a. Lead OSC Supervisor position is trained to re-qualification training occurs at about the same time period each year. Re-qualification courses may be scheduled up to three months away from the generic schedule to accommodate plant events such as outages.

Annual re-qualification training courses shall be completed within 15 months. Training requirements are discussed in the ERO Training Program Description.

Training other than that shown in the ERO **Emergency Preparedness Training Program** Description may be given to address specific needs. personnel requiring training include:

- 1. Emergency Directors (includes the aspect of classification, notification and PARs)
- 2. Accident Assessment
- 3. Radiation Protection and Monitoring
- a. ERO RPT position is qualified to ANSI technician standards.
- b. ERO RP Qualified Individual position is task qualified to perform the following:
- Provide RP coverage for accessing known radiological environments (which includes respirator qualifications)
- Control dosimetry and RCA access
- Provide in-plant surveys
- c. ERO Field Monitoring Team Technicians receive initial training for the tasks they will be expected to perform during an emergency. The following general topics will be included in the training:
- Equipment and equipment checks
- Communications
- Plume tracking techniques
- Personnel monitoring
- Emergency exposure criteria
- Locations and use of radiological emergency equipment
- 4. Repair and Damage Control Teams
- perform RP supervisory tasks.
- b. Operations, maintenance, chemistry and radiation protection personnel who would be assigned to repair and damage control teams are trained as part of their normal job-specific duties to respond to both normal and abnormal plant conditions and work under direction of an ERO supervisor in the OSC.
- 5. Security
- a. Security personnel receive emergency plan training as part of their normal job specific training.
- b. Security personnel assigned a specific ERO position receive training on emergency plan

level of detail of the NUREG-0654 R2 element and fleet description. Previous annual retraining requirement now determined on a task basis using SAT practices. Program responsibilities documented in Section P.

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400.	12.2.2 Support Groups Personnel from support groups who report to Seabrook Station shall be offered training designed to aid them in performing their emergency response function, including the Town of Seabrook Fire Department. This training shall be offered annually. Support groups that do not report to Seabrook Station shall also be offered training designed to aid them in performing their emergency response function. These personnel include NH Homeland Security & Emergency Management, NH Department of Health and Human Services, Massachusetts Emergency Management Agency, Massachusetts Department of Public Health, Maine Emergency Management Agency, Wentworth-Douglass Hospital and Exeter Hospital. (Protected: Ref. NRC IR 86-18[03]) This training shall be offered annually.	related tasks.  6. Fire Brigade – Refer to the site fire protection program.  7. First Aid – Personnel assigned as first aid responders maintain qualifications equivalent to Red Cross Standard First Aid techniques.  [CEP – 0.2]  The ERO training program is developed and evaluated based on position-specific responsibilities/tasks using Systems Approach to Training (SAT) principles, when applicable.  [CEP – 0.1.a]  NextEra offers emergency response training annually to local support organizations. Training includes basic radiation protection, the notification process for their organization, and their organization's expected role. The offered training for local support organizations who will enter the site also includes the general site layout, site access procedures, and the identity (by position and title) of the onsite individual who will control their support activities.	Non-RIE Removed support groups that do not report to site. Offsite agency training is addressed in their respective plans. If any group having a role in the overall emergency response for Seabrook Station request training it would be provided on a as needed basis.
401.	12.2.3 Station Personnel with No ERO Assignment Station personnel with no ERO assignment shall be trained in their proper response to an emergency		Potential RIE 6-5 Refer to assessment Section 3.5 for the disposition of this item.
	during Plant Access Training. This training shall be given on an annual basis.		
402.	12.2.4 Emergency Preparedness Department Personnel Emergency Preparedness Department personnel receive plant access training and training specific to their individual ERO assignments. In addition, the Emergency Preparedness Manager schedules personnel participation in specialized emergency	[CEP – P.1] Initial EP program training for new EP staff members is performed and documented. Continuous training for EP staff members is performed periodically through job related opportunities (such as courses, workshops, information exchange meetings with other licensees,	Editorial  No added, removed or altered commitments or change of intent.

	planning training, participation in EP related conferences, and as technical specialists for EP audits at other sites.	conferences held by industry and government agencies, etc.) to maintain current knowledge of the overall planning effort or to enhance working knowledge of plant operations.	
403.	12.2.5 Records Documentation of training conducted in support of emergency planning is maintained in accordance with appropriate nuclear training procedures.		Non-RIE Training documentation is contained in the ERO Training Program Description
404.	12.3 Review and Updating of Plan and Procedures Independent reviews of the Seabrook Station emergency preparedness program shall be conducted every 12 months. The reviews shall include the emergency plan, its implementing procedures, training, equipment, readiness testing and State and local government planning interfaces. Management controls shall be implemented for evaluation and correction of review findings. The result of the review, along with recommendations for improvements, shall be documented and retained for a period of five years. Intent revisions to the SSREP and to SSER emergency plan implementing procedures ER 1.1, Classification of Emergencies; ER 1.2, Emergency Plan Activation; and ER 5.4, Protective Action Recommendations, shall be submitted to the On-Site Review Group (ORG) for review and approval before implementation. Intent revisions of other emergency plan implementing procedures contained in the SSER shall be reviewed by a station qualified reviewer per the Station Qualified Reviewer program and approved by the Emergency Preparedness Manager prior to implementation. On an annual basis, written agreements with outside support organizations and government agencies shall be evaluated to determine if such agreements are still valid. (Protected: Ref. FPL Common Letter L-2005-214)	[CEP – P.4] The formal emergency plan (as defined in the introduction section) and the emergency plan implementing procedures (as defined in Section P.7) will be reviewed on an annual basis and updated if necessary. Any changes to regulations, issues identified by drills and exercises, assessments and audits, or other updates will be evaluated and incorporated into the emergency plan if warranted. Letters of Agreement will be reviewed and verified on an annual basis, and updated if warranted. Changes will be processed in accordance with 10 CFR 50.54(q) requirements and NextEra document control/records management procedures.	Non-RIE Emergency plan maintenance details are contained in the maintenance procedures.
405.	If not, then these agreements shall be renewed and updated; otherwise, the agreements shall be considered current. Telephone number listings associated with the Station emergency response facilities shall be reviewed quarterly and updated if necessary. Revisions shall be made in accordance	[CEP – P.10] The NextEra emergency communications directory contains select contact numbers for ORO and support organizations identified in the emergency plan and implementing procedures. The ERO call-out system	Potential RIE 6-6 Refer to assessment Section 3.6 for the disposition of this item.

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	with current regulations and guidelines on a	contains comprehensive ERO contact information.	
	continuing basis, as applicable.	NextEra ERO contact information is verified semi-	
		annually and updated as needed.	
		Facility and support contact information in the	
		emergency communications directory is verified	
		annually and updated as needed.	
406.	Revisions and changes to the plan and procedures	[CEP – P.5]	Editorial
	shall be forwarded to all document control list recipients. (Protected: Ref. NRC IR 86-18[31])	Revised copies of the emergency plan are posted and distributed in accordance with NextEra records management system procedures.	No added, removed or altered commitments or change of intent.
		Changes to the emergency plan are submitted to the NRC in accordance with 10 CFR 50.4.	
407.	12.4 Maintenance and Inventory of Emergency	[CEP – H.11]	Non-RIE
	Equipment and Supplies Emergency equipment and supplies are maintained as indicated in the Emergency Preparedness Facility Inventory Manual. Emergency portable survey instruments and dosimetry will be calibrated in accordance with applicable health physics programs and procedures. Along with requirements for calibration, the instruments shall be source-checked before each use. There are sufficient reserve instruments and equipment to replace those that are removed from emergency kits for calibration purposes. An inventory of the emergency storage locations shall be made, and discrepancies shall be noted and corrected.	NextEra emergency equipment and kits are inventoried to verify adequate supplies and materials, and to inspect condition semi-annually and following each use.  Emergency use equipment and instruments are operationally checked semi-annually during the inventory, and prior to use if needed as specified in procedures.  Sufficient reserves of instruments and equipment are maintained to replace those removed from service for calibration or repair.  [CEP- H.11.b]  Requirements to calibrate emergency equipment and instruments are specified in site procedures.	Emergency equipment and supplies maintained in accordance with the emergency preparedness facility inventory document.
408.	<ol> <li>12.5 Emergency Preparedness Manager         The Emergency Preparedness Manager is the emergency planning coordinator with overall authority for radiological emergency response planning for Seabrook Station. The Emergency Preparedness Manager has the following responsibilities:     </li> <li>Maintain the Seabrook Station Radiological Emergency Plan (SSREP).</li> <li>Maintain the Emergency Response Manual (SSER).</li> <li>Ensure the conduct of drills and exercises.</li> <li>Track identified drill and exercise deficiencies, and associated corrective action.</li> <li>Maintain Emergency Response Organization</li> </ol>	[CEP – P.3] The site Regulatory Affairs Managers are responsible for the development, maintenance, review, and updating of the emergency plan, as well as the coordination of the plan with other response organizations.	Editorial  No added, removed or altered commitments or change of intent.

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	staffing.	
	6. Maintain Emergency Response Organization	
	<ul><li>pager assignments and publish schedules.</li><li>7. Maintain the Emergency Response Organization</li></ul>	
	notification system data base.	
	Maintain the emergency response facilities as	
	described in the Seabrook Station Radiological	
	Emergency Plan and Emergency Response	
	Manual.	
	9. Obtain and track the availability of facilities and	
	equipment required to maintain the Seabrook	
	Station emergency response in a continuous	
	state of readiness.	
	10. Ensure implementation of the	
	communications and equipment test program.	
409.	12.6 Technical Training Supervisor	Non-RIE
	Ensures the conduct and documentation of	Emergency plan maintenance
	emergency preparedness training.	details are contained in the station
		procedures.
410.	12.7 Operations Support Manager	Non-RIE
	Maintains Operations Department fire	Emergency plan maintenance
	response and medical emergency response	details are contained in the station
	procedures.	procedures.
	2. Ensures the conduct of fire and medical	
	emergency response drills. Appendices	
411.	Appendix A, Emergency Response Organization	Non-RIE
711.	Position Definitions	Appendix A removed:
		Table 1 - ERO prerequisites and
		background contained in training
		program description.
		Table 2 - Staffing assignments and
		responsibilities documented in
		Section B of common emergency
		plan.
412.	Appendix B, Canceled	N/A
413.	Appendix C, Evacuation Time Estimates	Non-RIE
		Appendix C removed. ETE
		incorporated by reference.
414.	Appendix D, Letters of Agreement with Emergency	Non-RIE
	Response Organizations	

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		Appendix D removed. LOAs and contracts are listed in the site annexes and are maintained locally on file.
415.	Appendix E, Seabrook Station Public Alert and Notification System	Non-RIE Appendix E removed. ANS design report incorporated by reference.
416.	Appendix F, Emergency Equipment	Non-RIE  Appendix F removed. Emergency equipment maintained in accordance with the emergency preparedness facility inventory document.
417.	Appendix G, Seabrook Station Supporting Emergency Plans and Procedures Listing G-1	Non-RIE Appendix G removed. Listing of supporting emergency plans and Procedures are contained in the common emergency plan and site annexes Section P.
418.	Appendix H, NUREG-0654/Seabrook Station Radiological Emergency Plan Cross Reference	Non-RIE Appendix G removed. The common emergency plan and site annexes are formatted using the outline numbering style of NUREG-0654 R2 to explicitly align with the 10 CFR 50.47(b) planning standards, the requirements of 10 CFR 50 Appendix E, and the elements of NUREG-0654 R2. That formatting provides a direct cross-reference to the elements of NUREG-0654 R2.

# **ENCLOSURE 6**

# Point Beach Nuclear Plant Analysis Report #2

**ERO** Key Function and Augmentation Analysis

(71 pages follow)





# Point Beach Nuclear Plant (PBN)

# Analysis Report #2 ERO Key Function and Augmentation Analysis

12/09/22

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# 1.0 INTRODUCTION

NextEra has developed the proposed emergency plan using the NUREG 0654/FEMA-REP-1, Revision 2 (NUREG-0654 R2). This analysis was conducted to identify and justify deviations to the proposed Emergency Response Organization (ERO) from the current emergency plan and alternative approach to the NUREG-0654 R2 guidance.

The NRC has provided Technical Basis for The Proposed Guidance in NUREG-0654/FEMA-REP-1, Section II.B, "Emergency Response Organization" to assist licensees in their development of site-specific staffing plans, particularly when the licensee may want to develop an alternative approach. The technical basis document contains information regarding;

- the importance of each key function for effective emergency response.
- the basis for the positions and number of responders selected to fulfill those functions.
- the basis for the augmentation times to relieve on-shift personnel of those functions.

Additionally, NRC has issued RIS 2016-10, License Amendment Requests for Changes to Emergency Response Organization Staffing and Augmentation.

The NRC 0654/FEMA-REP-1 Section II.B technical basis document and RIS 2016-10 were used in the development of the ERO key functional and augmentation analyses.

Summary of this analysis is contained in the License Amendment Request enclosures 1, 2, 3 and 4. The summary identifies the deviations and alternate approaches, reason for the changes, and the basis concluding that the proposed emergency plan continues to meet the planning standards in 10 CFR 50.47(b) and the requirements in Appendix E to 10 CFR Part 50.

# 1.1 REGULATORY REQUIREMENTS

The planning standards in 10 CFR 50.47(b) establish the requirements that the onsite and offsite emergency response plans must meet for the NRC staff to make a finding that there is reasonable assurance that the licensee can, and will, take adequate protective measures in the event of a radiological emergency. The capabilities of on-shift and augmented ERO staffing are addressed under the following regulations:

- 10 CFR 50.47(b)(2) states, "On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified."
- 10 CFR 50.47(b)(9), states, "Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use."
- 10 CFR 50.47(b)(11), states, in part, "Means for controlling radiological exposures, in an emergency, are established for emergency workers...."
- Appendix E to 10 CFR Part 50, "Emergency Planning and Preparedness Production and Utilization Facilities," Section IV, Part A, "Organization," states, in part, "The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization...."

# 1.2 GUIDANCE

NUREG-0654 R2, Section II, "Planning Standards and Evaluation Criteria," Evaluation Criteria II.B. addresses the Emergency Response Organization planning standard 10 CFR 50.47(b)(2) and the applicable sections of Appendix E to CFR Part 50. Evaluation Criterion II.B.3 specifies:

A table is developed depicting the site-specific on-shift staffing plan, as well as the ERO staffing augmentation plan. Table B-1, "Emergency Response Organization (ERO) Staffing and Augmentation Plan," provides a model for licensees to consider.

The NUREG-0654 R2 Table B-1 lists the Emergency Preparedness functions and augmentation times needed to Implement the typical emergency plan. The table is a model to be considered in the development of a site-specific emergency plan.

NextEra has developed the proposed emergency plan based upon based upon NUREG-0654 R2, Evaluation Criteria II.B.5 for minimum ERO on-shift and augmentation staff. The proposed ERO staffing plan contains an alternate approach which was evaluated using the functional area analysis of NUREG-0654 R2 and as much as possible a performance-based approach.

Along with evaluating the proposed ERO plan, this analysis report makes available sufficient bases and information for the NRC staff to evaluate whether the proposed alternative methods meet the intent of the regulatory planning standards and does not relax the regulatory planning standards.

The alternative methods are based upon the precedence of previously approved license amendment requests referenced in the document and others are considered first-of-a-kind (FOAK) methods.

# 2.0 DEVIATION SUMMARY

# 2.1 ERO Key Function Analysis

The ERO Key Function Analysis compares and evaluates the current emergency plan on-shift and minimum staff ERO positions against those in the proposed emergency plan and in NUREG-0654 R2 guidance. Staffing deviations in the proposed emergency plan from the current emergency plan and NUREG-0654 R2 are categorized as potential RIEs and evaluated to determine whether the capability to perform the function is sustained (no degradation or loss of function).

Refer to Attachment 1, ERO Staffing Plan Comparison Table, for a side-by-side summary of staffing and augmentation comparison between NUREG-0654 R2 Table B-1, the current emergency plan, and the proposed emergency plan.

The Key Function Analysis establishes that no degradation or loss of function, or misalignment or loss of task assignment would occur as a result of any change made to the on-shift and minimum augmenting ERO positions. This alternate staffing approach continues to support timely and effective performance of the Major Functional Areas and Major Tasks listed in NUREG-0654 R2 Table B-1.

# 2.1.1 [Potential RIE 1-1] No EOF Director/ED Position

The proposed emergency plan does not assign an EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level for the Command and Control function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Command and Control function from two (2) to one (1).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

For a SAE ECL, or greater, these functions (or a subset of them), typically those associated with protective action recommendations (PARs), should be assigned to an Emergency Director located in the EOF....

The NextEra TSCs and EOFs are activated at an Alert emergency classification level. By activating both the TSC and EOF at an Alert emergency classification level and maintaining the non-delegable tasks of classification, notification, and PARs in the TSC, the proposed emergency plan does not need to provide additional augmenting ERO positions to move those tasks between emergency response facilities.

An EOF Emergency Director minimum staff ERO position is not needed at the Site Area Emergency classification level as the Command and Control function, along with all non-delegable responsibilities, are transferred from the Shift Manager to the Site Emergency Director at the Alert emergency classification level and remain in the TSC throughout a declared emergency. This change in the proposed emergency plan simply retains the Command and Control function in the TSC with the Site Emergency Director.

# 2.1.2 [Potential RIE 1-2] No EOF ORO Communicator Position

The proposed emergency plan does not provide an EOF Offsite Communicator minimum staff ERO position at the Site Area Emergency classification level for the Communications function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the ORO aspect of the Communications function from two (2) to one (1).

This change deviates from the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

This function should consist of 2 staff members to fulfill the communication needs, at a minimum: 1 for the NRC and 1 for ORO notification and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee. These are typically located in the TSC. For an SAE ECL, or greater, at least 1 additional communicator should be staffed in the EOF.

NUREG-0654 R2 guidance designates the Offsite Response Organization (ORO) (State/County) communication location as 'typically' in the TSC based on staggered activation of the emergency response facilities.

The NextEra TSCs and EOFs are activated at an Alert emergency classification level. By activating both the TSC and EOF at an Alert emergency classification level and maintaining the non-delegable tasks of classification, notification, and PARs in the TSC, the proposed emergency plan does not need to provide additional augmenting ERO positions to move those tasks between emergency response facilities.

An EOF State/County Communicator minimum staff ERO position is not needed at the Site Area Emergency classification level as the Communications function for the ORO remains in the TSC throughout a declared emergency. This change in the proposed emergency plan simply retains the Communications function for the ORO in the TSC.

# 2.1.3 **[Potential RIE 1-3]** No EOF NRC Communicator

The proposed emergency plan does not provide for an EOF NRC Communicator for the Communications function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the NRC aspect of the Communications function from two (2) to one (1).

This change deviates from the current plan minimum staff ERO position requirement.

**Deviation Justification:** NUREG-0654 R2 Table B-1 states the 2<sup>nd</sup> NRC communicator should be staffed "As needed".

Use of the URI dose assessment model streamlines the dose assessment function and the EOF RP Coordinator is fully trained and available to assist if needed. The Dose Assessor can use a headset to be continuously available to answer NRC request for information on the HPN Line. If the event escalates to a level that would require additional capability additional personnel can be called to assist.

### 2.1.4 [Potential RIE 1-4] On-shift RP Personnel Allowed Collateral Duties

The proposed emergency plan allows collateral duty assignments to be given to radiation protection personnel when performing the Radiation Protection function. Specifically, this change allows radiation protection personnel to perform the Dose Assessment /Projections function and support other on-shift actions when not assigned a response activity.

This change deviates from the NUREG-0654 R2 on-shift staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

The ability to provide radiological expertise when the plant is experiencing an event with serious radiological consequences is crucial, due to the unknown radiological environment faced by emergency workers, particularly at the onset of the event. This function should be staffed by 2 qualified RP staff members on-shift (or 1 per unit for multi-unit sites). These staff members should not have any collateral duties during emergency response.

Consistent with NUREG-0654 R2, the proposed emergency plan assigns the Dose Assessments / Projections as a collateral duty. This emergency response collateral duty can be assigned to any on-shift individual qualified in Dose Assessment.

Personnel who are not ANSI qualified RPTs, such as an appropriately trained and qualified operator or a chemistry technician, may be assigned to the dedicated on-shift RPQI position. When the RPQI position is not filled by a qualified ANSI RPT, they cannot be given time sensitive or other tasks during emergency response that interfere with the Radiation Protection function.

### 2.1.5 [Potential RIE 1-5] Fewer OSC RP Response Personnel

The proposed emergency plan reduces the number and qualifications of minimum staff ERO positions for the Radiation Protection function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Radiation Protection function from six (6) in the current emergency plan and in NUREG-0654, to five (5) in the proposed emergency plan, consisting of three (3) RPTs and two (2) RP Qualified individuals that are task trained but not required to be ANSI equivalent RPTs.

This change deviates from the current plan requirement and NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

While not all Alert ECLs (or lower) have radiological consequences, licensees should develop their ERO staffing plans for a worst-case scenario from a radiological risk perspective, i.e., an event which results in the immediate (within 60-minutes) loss of 2 or more fission product barriers leading to significant and unknown radiological conditions. The augmentation (support) of this position should occur in two stages: within 60 minutes of an Alert ECL or greater, 3 additional qualified RP staff should be available, and within 90 minutes of an Alert ECL, or greater, an additional 3 additional qualified RP staff should be available, and both are typically staffed in the OSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Personnel assigned to perform this function should be fully qualified HP technicians as described in ANSI/ANS-3.1-1993, "Selection, Qualification, and Training of Personnel for Nuclear Power Plants," that was approved for use by Regulatory Guide 1.8, "Qualification and Training of Personnel for Nuclear Power Plants."14 Personnel who are typically trained to a level of "meter qualified" to perform basic HP duties are not trained or do not have the necessary experience to perform complex HP duties, as discussed in HPPOS-0238, that would be necessary in a radiological emergency. For example:

- (1) Typically the training does not include providing HP coverage for other personnel.
- (2) Radiation protection is not normally incorporated into normal job duties.
- (3) Radiological conditions during an emergency may be unknown or rapidly changing.

The following emergency plan functions would constitute in-plant protective actions, which would require a fully qualified HP technician:

- Provide guidance for personnel protection to assist in minimizing personnel exposure.
- Provide guidance for exposure authorizations, dose guidelines, and postexposure assessments.
- Provide job coverage for in-plant repair and corrective actions, and operations support, under changing radiological conditions.
- Provide guidance for emergency decontamination of personnel, equipment, and facilities.
- Provide guidance for personnel contamination control and respiratory protection.

NUREG-0654 R1 lists the RPT functions assigned to the six augmenting OSC RPTs as:

- In-Plant Surveys
- HP coverage for repair, corrective actions, search, and rescue first aid & firefighting
- Personnel Monitoring
- Dosimetry
- Access Control

These functions have been reworded but remain similar in NUREG-0654 R2 as:

- Provide in-plant surveys
- Provide radiation protection coverage for responders accessing unknown radiological environments during emergency conditions
- Control dosimetry and control area access

The number of augmenting RPTs for the above functions in NUREG-0654 R2 Table B-1 has not changed from the number in NUREG-0654 R1 Table B-1.

The following guidance documents were considered in the staffing of augmenting ERO radiation protection personnel in the common emergency plan:

- Per RIS 2016-10, the licensee could show that the basis for the justification includes the availability of installed area, process, airborne and effluent radiation monitors, automated systems and information technology solutions, and enhanced work processes that would be available under accident conditions. Supporting tools and processes that may be considered include portal monitors, self-alarming dosimeters, and automated access control system for the radiologically controlled area (RCA) that maintain active radiation work permits, which are readily available if an emergency is declared (e.g., the system verifies qualifications, dose margins, and access requirements).
- Per HPPOS-238, Health Physics Technicians (HPTs) may independently perform specific tasks or job assignments if they meet the required prerequisites and complete the required task qualifications of their plant training programs. There are certain tasks and job assignments, however, that require in-depth knowledge and can only be performed by fully qualified ANSI technicians.

NextEra controls the qualification of the ERO as outlined in 10 CFR 50.47(b)(15). To ensure that qualifications are consistent throughout the fleet, the RPQI qualification requirements are maintained in Section O of the proposed emergency plan. The RPQI ERO personnel will be task qualified to the tasks listed in NUREG-0654 Revision 2 Table B-2 (shown above)

This approach meets the intent of 50.47(b)(15) and allows the Systematic Approach to Training (SAT) process to determine and control the RPQI qualification requirements by task. The proposed emergency plan will utilize the SAT process to set the qualification requirements of the RPQI, independent of an ANSI 8.1 standard, while ensuring that all personnel are trained to be able to respond to an emergency – not to be a day-to-day RPT.

Per NUREG-0713, Occupational Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities 2004 and Draft Tables and Figures for 2020 NUREG-0713, the Average Measurable TEDE per individual has decreased from 0.31 rem (1995) to 0.09 rem (2020). Advances in technology in access control, electronic dosimetry (personnel monitoring and remote monitoring), pre-developed RWPs (for normal and for emergency conditions), and ARM/PRM plant computer information display systems reduce radiation protection personnel involvement in radiological activities and have contributed to the decrease.

- Dosimetry and access control is established using technological means to ensure that personnel wear the correct dosimetry into the radiological controlled area and are signed onto the RWP (affirming that they have read and understand the RWP). Telemetry with field communications and dosimetry can provide the RP personnel with all data that one would have previously needed equipment and multiple personnel to perform.
- On-shift and augmented ERO radiation protection coverage is monitored and provided by radiation protection personnel. The radiation protection personnel ensure that dispatched personnel are provided real time information on radiological conditions when deployed and if conditions change at the work location. In-plant radiological conditions are provided using technology available to the radiation protection personnel on the plant computer information display systems.

As this technology has become more integrated at NextEra sites and throughout the industry for normal and outage operations their use has become commonplace. As such, radiation protection personnel that are properly trained on the technology outlined here are proficient with their use in emergency response functions. These enhancements would be used during a radiological emergency.

The OSC utilizes the day-to-day "Fix-It-Now" (FIN) Team concept, which includes radiation protection support as necessary. OSC minimum staffing requires 3 craft personnel. An RPT would monitor plant conditions remotely and assist the Lead OSC Supervisor with RP oversight activities while the other RP personnel (RPTs and RPQIs) could be tasked with providing coverage for craft personnel if a team is dispatched into a radiologically controlled area.

All NextEra sites are Pressurized Water Reactor (PWR) designs. There are fewer radiologically controlled areas at PWRs than at Boiling Water Reactor (BWR), which allows for less RP support staff during normal operations. Per Draft Tables and Figures for 2020 NUREG-0713, the Average Collective Dose per Reactor in 2020 is 31 person-rem at PWRs and 95 person-rem at BWRs. Even with a SG tube rupture using the main condenser as the cooldown medium, the turbine buildings will not be unmanageable with the responders as the major steps of each site's emergency operating procedures for a SG tube rupture will have completed their major functions of "identify – isolate – cooldown – depressurize – terminate safety injection" are expected to be complete prior to ERO arrival. All temperature control steps later in the procedures where the ERO may be present will be minimal temperature control steps which send minimal additional contaminated steam into the secondary systems. As the limiting accident that will expand radioactively controlled/ contaminated areas outside of the radiologically controlled area, there is no need to staff PWR sites at the same level outlined in the NUREG, which factored in BWR designs into their calculations for staffing levels.

The above statements support the position that Radiation Protection function can be performed by the four augmentation radiation protection personnel ERO positions.

#### 2.1.6 [Potential RIE 1-6] No On-site Field Monitoring Team

The proposed emergency plan does not staff the onsite field monitoring minimum staff ERO positions for the Field Monitoring Teams function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the onsite field monitoring aspect of the Field Monitoring Teams function from two (2) to zero (0).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

The ability to locate, monitor, and track a radioactive plume is important to ensure appropriate protective measures are taken in response to a radiological event. The ability to staff these teams before they may be needed (i.e., before a radiological release) greatly enhances the ability of the licensee to provide timely and accurate PARs.

- An onsite FMT should be staffed, consisting of a monitor and a driver. This onsite FMT is responsible for radiological monitoring of the site's Protected Area. ...
  - i. The monitor should be qualified to assess radiation and contamination levels, but need not be an ANSI qualified RP Technician as long as the FMT is under the direct supervision of senior staff in the TSC or EOF.

iii. The driver should be knowledgeable about the vehicle and the proposed routes to be traversed.

NUREG-0654 R2 Table B-1 guidance for augmenting Field Monitoring Team staffing has not changed from NUREG-0654 R1 (six total personnel) despite the technology (equipment and communications) and process advancements in the last 40+ years.

NUREG-0654 R2 designates one on-site (including inside of the Protected Area) Field Monitoring Team and one off-site Field Monitoring Team responding in 60 minutes to be ready to respond to a radiological release or to detect the radiation in the field thus confirming and quantifying a release. A second off-site Field Monitoring Team responding in 90 minutes is added to back up the first off-site Field Monitoring Team.

# On-site Field Monitoring Team Driver ERO Position

On-site survey and sampling activities are performed without a vehicle since the site Protected Area boundaries are relatively small and plume tracking is not applicable. The Protected Area can be easily and efficiently traversed on foot or in a utility vehicle. The survey equipment is portable and does not require two individuals for transport or operation. Thus, there is no need for an on-site Field Monitoring Team Driver.

# On-site Field Monitoring Team Technician ERO Position

The current emergency plan utilizes two Field Monitoring Teams, primarily assigned to monitor conditions outside the Protected Area. NextEra typically uses an individual from the pool of OSC radiation protection personnel to perform on-site out-of-plant (inside the Protected Area) surveys if needed. However, one of the two Field Monitoring Teams may be called upon to enter the Protected Area to perform surveys when OSC radiation protection personnel are assigned other tasks.

For NextEra stations, two Field Monitoring Teams are sufficient to perform on-site and off-site field monitoring activities. All NextEra sites are located on major bodies of water (their EPZs being approximately 40% water or greater) with no requirements nor capabilities for monitoring activities on these bodies of water. As each site's EPZ is ~40+% water, there is not as much area to cover for the field monitoring teams. With NextEra EPZs being effectively smaller than landlocked sites, less personnel are needed to cover an effectively smaller EPZ.

Additionally, the NUREG-0654 R2 technical basis for the ERO staffing guidance includes the following clarification:

The onsite FMT should not be staffed if the radiological conditions jeopardize the safety of the FMT, typically after a Site Area Emergency has been declared.

Based upon NRC guidance two Field Monitoring Teams are sufficient to monitor radiological conditions after a SAE is declared. By not designating onsite and offsite FMTs, a total of two FMTs can sufficiently provide radiological monitoring at NextEra stations under all conditions.

# 2.1.7 [Potential RIE 1-7] No OSC RP Supervisor Position

The proposed emergency plan does not assign an OSC RP Supervisor minimum staff ERO position to the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

An ... RP Supervisor should be staffed within 90-minutes of an SAE ECL, or greater, and is typically staffed in the OSC. The OSC Supervisor can effectively manage the craft [personnel] resources for the additional 30-minutes prior to the [supervisory] respond, as demonstrated through drills and exercises, without compromising the staff's reasonable assurance finding in accordance with 10 CFR 50.47(a).

The Lead OSC Supervisor is assigned the RP aspect of the Supervision of Repair Team Activities. To ensure that Lead OSC Supervisor position can perform the RP supervision sub-function, their ERO training / qualification program will include previous RP Supervisor experience or will receive training to supervise RP emergency response tasks. See Section O of the proposed emergency plan for the description of the qualification of the Lead OSC Supervisor.

OSC radiation protection personnel responding to the event will report to the Lead OSC Supervisor. With 3 RPTs and 2 RPQIs responding, an RPT can assist the Lead OSC Supervisor and FIN Supervisor with coordination of RP activities needed to dispatch OSC teams, thus not overburdening the Lead OSC Supervisor. If there is a particular question for RP supervision, the TSC RP Coordinator would also be available to answer or coordinate a response to questions.

### 2.1.8 **[Potential RIE 1-8]** Single Craft Supervisor Position

The proposed emergency plan does not assign OSC maintenance supervisors for each craft. Specifically, this change reduces the number of OSC craft supervisor minimum staff ERO positions used for the Supervision of Repair Team Activities function from three (3) to one (1).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

An Electrical Supervisor, a Mechanical Supervisor, an I&C Supervisor ... should be staffed within 90-minutes of an SAE ECL, or greater, and is typically staffed in the OSC. The OSC Supervisor can effectively manage the craft [personnel] resources for the additional 30-minutes prior to the [supervisory] respond, as demonstrated through drills and exercises, without compromising the staff's reasonable assurance finding in accordance with 10 CFR 50.47(a).

The FIN Supervisor fills the supervisor role for mechanical, electrical and I&C craft disciplines. This is a deviation from NUREG-0654 R2 guidance which only discusses combining Electrical and I&C supervisory roles.

The normal station maintenance organization allows for the management of craft personnel under a single supervisor hierarchy. The position of FIN Supervisor is filled by management and supervisory personnel from the Maintenance Department who are familiar with the direction of all disciplines within the department. OSC performance under this organizational structure has been demonstrated in numerous evaluated exercises and remains consistent with the acceptable OSC staffing hierarchy of the current emergency plan.

### 2.1.9 [Potential RIE 1-9] No IT Technician ERO Positions

The proposed emergency plan does not assign IT Technicians in the TSC and EOF/JIC. Specifically, this change reduces the number of IT Technicians minimum staff ERO positions used for the Information Technology function from two (2) to zero (0).

This change deviates from the NUREG-0654 R2 minimum staff ERO guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

Advances in technology have led to significant enhancements in many areas of emergency response, such as communications, monitoring, displays, digital procedures, etc. Licensees should consider the use of this technology whenever it enhances their ability to protect the health and safety of the public. However, if the implementation of the emergency plan is so reliant on this technology that without it, the emergency plan could not be implemented, then an IT Lead should augment (support) the response within 60-minutes of an Alert ECL, or greater, if the TSC/OSC has this technology; and within 60-minutes of an SAE ECL, or greater, if the EOF or JIC/JIS has this technology. If the licensee has capable backup plans for if/when this technology fails, then this function is not necessary. In other words, if the ERO is reliant upon technology such that its loss would prevent the ERO from functioning, then a support position should be part of the ERO to assist in recovery of this technology. If the loss of this technology would lead to the implementation of backup strategies, then this position would not need to be part of the ERO and can be called upon as-needed. Licensees should consider using the listing of critical digital assets, identified in accordance with 10 CFR 73.54, as the basis for determining if this position should be considered part of the EROs augmented response.

Per NUREG-0654 R2, minimum staff ERO IT positions are only required to be described in the emergency plan if critical digital assets (CDAs) are identified per 10 CFR 73.54, Protection of digital computer and communication systems and networks. The proposed emergency plan relies on PI ProcessBook for monitoring plant parameters, which has been determined to be a CDA. The IT process for addressing issues with CDAs operates full time outside the emergency plan on a 24/7 basis. Additionally, NextEra maintains an IT Help Desk 24 hours per day, 7 days a week. Many computer issues are addressed remotely with an IT specialist through the Help Desk.

Each of the EP related digital assets were evaluated as part of implementation of the Cyber Security Rule, 10 CFR 73.54(b). Under NEI 13-10, "Cyber Security Control Assessments," EP Critical Digital Assets have been assessed and controls have been put in place to protect the assets against cyber-attack. In conjunction with these controls, alternate administrative, non-digital, or adequately independent means have been put in place for performing each EP function, should the digital component or program fail.

Performance of digital equipment used by EP has shown to be acceptable during drills and exercises, and through routine inventory and surveillance checks. Performance of digital assets is monitored through either the Corrective Action Program (CAP) or the drill and exercise critique process. Performance trends are monitored, corrective actions are issued, and compensatory measures are taken as necessary.

With the IT department process for 24/7 coverage and built-in redundancy for communication systems and digital EP assets, NextEra has identified that there is no need to maintain an IT Technicians as minimum staff ERO positions.

# 2.2 **ERO Augmentation Analysis**

**Note:** Discussion around the technology Emergency Response Notification for Incidents and Events (ERNIE) are written in the future present tense throughout this document. The system is not installed at this facility currently but will be as part of the installation of the Common Emergency Plan.

The ERO Augmentation Analysis compares and evaluates the current emergency plan on-shift and minimum staff ERO positions against those in the proposed emergency plan and in NUREG-0654 R2 guidance. Augmentation deviations in the proposed emergency plan from the current emergency plan and NUREG-0654 R2 are categorized as potential RIEs and evaluated to determine whether the timeliness to perform the function is sustained without overburden of the on-shift staff.

Refer to Attachment 1, ERO Staffing Plan Comparison Table, for a side-by-side summary of staffing and augmentation comparison between NUREG-0654 R2 Table B-1, the current emergency plan, and the proposed emergency plan.

NUREG-0654 R2 establishes 60 and 90-minute minimum staff ERO augmentation time requirements for the TSC and OSC positions at the Alert emergency classification level; and a 60-minute minimum staff ERO augmentation time requirement for the EOF at the Site Area Emergency classification level.

The current emergency plan follows a 60 / 90-minute augmentation scheme as approved by the NRC in 1981 (amended by SE in 2015) with the following main elements:

- All ERO personnel are notified at the Unusual Event emergency classification level (response to facilities is elective for the Shift Manager) and called out to respond to their assigned facility at the Alert emergency classification level.
- The TSC, OSC and EOF are required to be activated at the Alert emergency classification level.
- The JIC is activated as soon as possible at an Alert or higher emergency classification level when determined appropriate with the offsite agencies, and whenever the EOF is activated.

The proposed emergency plan follows a 60 and 90-minute augmentation scheme with the following main elements:

- All ERO personnel are notified at the Unusual Event emergency classification level (response to facilities is elective for the Shift Manager) and called out to respond to their assigned facility at the Alert emergency classification level.
- The TSC, OSC, and EOF are activated at the Alert emergency classification level.
- NextEra implements JIS practices that are capable of performing the media information function at all emergency classification levels.
- The near-site JIC is activated when determined appropriate with the offsite agencies (at an Alert or higher emergency classification level).

The ERO augmentation analysis concludes that the differences in times between the proposed common emergency plan 60 and 90 minute response criteria and the NUREG-0654 R2 60 and 90 minute response criteria does not adversely delay turnover of responsibilities or negatively impact/overburden the ability of the on-shift personnel to perform operational actions or key functions. This alternate staffing approach continues to maintain initial facility accident response in all key functional areas at all times and provides timely augmentation of response capabilities.

### 2.2.1 [Potential RIE 2-1] Site Emergency Director at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time for the Site Emergency Director minimum staff ERO position that performs the Command and Control function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

This function is typically assigned to the Operations Shift Manager (OSM). The augmentation (relief) of this position is intended to relieve the OSM of EP functions so that the OSM can focus on the event response from an operations perspective. This should occur within 60-minutes of an Alert ECL declaration, or greater, and is typically a position staffed within the TSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Per the guidance in NUREG-0654, Table B-1, an augmented "Senior Manager" should fulfill the "Emergency Operations Facility Director" major task at 60 minutes. A licensee requesting a change in staff augmentation requirements that would have the lead manager unavailable to assume command and control within 60 minutes of the initial emergency declaration should show that the on-shift staff includes enough qualified supervision such that one supervisor will assume the emergency director role. The licensee should show that the on-shift supervisor performing the manager actions will not have any additional duties (e.g., each unit under the direction of a unit supervisor, a shift manager providing oversight of the plant response, and a designated emergency director responsible for emergency plan implementation).

The Shift Manager is given overall command and control with regard to ERO response activities. The position is used to perform Emergency Classification Level (ECL) determinations and develop Protective Action Recommendations (PARs), and to direct or perform ORO notification.

Historically, actual events have resulted in single ECL declarations with no further escalation. Realistic event progression that challenges multiple fission product barriers is relatively slow as demonstrated by the events at TMI and Fukushima. In this case, immediate plant operations and ERO response actions occur with 60 minutes of actual events and the on-shift staff are not burdened (tested) with multiple classifications.

Planning for a wide range of events, including rapidly progressing severe accidents (RPSA) is also required. These "fast breaker" events rise to the SAE or GE classification level without progressing through the lower ECLs. In this case, immediate plant operations and ERO response actions occur with 60 minutes of the RPSA scenario, and the on-shift staff are not burdened (tested) with multiple classifications.

Event scenarios that require escalation of the ECL prior to ERO augmentation are included in drills and exercises for the on-shift ERO. Technology and process enhancements including communications (ERNIE), ERDS, EAL matrix, PAR flowchart, etc. have reduced the time and attention it takes to perform tasks along with enhancing the effectiveness and efficiency of task performance. In addition, NUREG-0654 R2 has added a Classification Advisor position to assist and work in coordination with the Shift Manager, which NextEra has included as a collateral duty in the on-shift complement.

All Initiating Conditions (ICs) need to be demonstrated within the 8-year cycle. All Unusual Event and Alert level ICs are preformed from the Control Room. Thus, the opportunities for the Shift Manager to demonstrate the ability to perform emergency and operations responsibilities are provided multiple times over the 8-year cycle.

The demonstration and evaluation of the Shift Manager to perform their emergency plan functions is continuously evaluated during emergency planning drills/exercises and operations training simulator sessions. Various scenarios are used to evaluate the Shift Manager's ability to perform the following emergency planning functions, technical specification responsibilities and operations oversight.

Operations training simulator sessions test and evaluate the Shift Manager's ability to effectively and efficiently perform all required functions / responsibilities until the event is stabilized (session is complete); this in some circumstances is greater than the 90 minutes ERO response time. Note – there is no minimum required length of time for the training sessions.

Licensed Operator Continuing (LOR) training periodically has scenarios that extend to 90 minutes without augmented ERO involvement. For example, a training scenario is performed on a periodic basis to ensure that a FLEX Beyond Design Basis External Event can be mitigated by the minimum on-shift staff. The FLEX scenario assumes that the ERO will not be on site to provide support for a minimum of 6 hours. While this is covered under 10 CFR 50.155 and not Appendix E, the example is given as a major event where augmented ERO response is not provided while the site compliment is under heavy demand for action to mitigate the event.

NextEra Energy has added a drill/exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for at least 90 minutes. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

The Site Emergency Director 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the Command and Control function.

On Shift impact of change from 60 to 90 minutes: The shift manager oversees site response until relieved. As outlined above, the Shift Manager is in oversight role of the plant operations at this point so any additional classifications or PAR decision making from degrading equipment is not an additional burden.

Due to the Shift Managers and Site Emergency Directors having the similar qualifications similar backgrounds, the skillsets that the Site Emergency Directors bring with them are similar to those of the Shift Manager.

The (Emergency) Classification Advisor role on shift is also able to perform better as the principal assistant to the Shift Manager due to technological improvements outlined in their section below.

One function that the ERO may take on is the non-critical communications with offsite agency leadership if an event is in progress. These communications are predominantly clarification questions that take 1-3 minutes to answer as their ERO yet in place. This does not add a significant additional burden on the Shift Manager.

When the Site Emergency Director (SED) assumes command and control, the SED routinely involve the Shift Manager in all classification and PAR decision making for validation so the additional burden of stating the classification as it is coming from the SM vice from the TSC would not result in an overburden.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

# 2.2.2 [Potential RIE 2-2] Classification Advisor at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC Classification Advisor minimum staff ERO position that performs the Emergency Classifications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC.

Maintaining the ability to perform this function at all times ensures that ECL decisions, and as applicable, the PAR decisions, are timely and accurate as these decisions have a direct relationship to public health and safety from the consequences of a radiological event. This function shall work in coordination with the OSM, or Emergency Coordinator, depending on which position is in command and control, and as a result should be available on shift and in the TSC.

The on-shift Classification Advisor is given a limited role with regard to ERO response activities. The position is used to second check Emergency Classification Level (ECL) determinations and Protective Action Recommendations (PARs) developed by the Shift Manager, and to support ORO notification information accuracy. The on-shift Classification Advisor has received training to perform their assigned EP functions and assist the Shift Manager with emergency responsibilities.

Historically, actual events have resulted in single ECL declarations with no further escalation. Realistic event progression that challenges multiple fission product barriers is relatively slow as demonstrated by the events at TMI and Fukushima. In this case, immediate plant operations and ERO response actions occur with 60 minutes of actual events and the on-shift staff are not burdened (tested) with multiple classifications.

Planning for a wide range of events, including rapidly progressing severe accidents (RPSA) is also required. These "fast breaker" events rise to the SAE or GE classification level without progressing through the lower ECLs. In this case, immediate plant operations and ERO response actions occur with 60 minutes of the RPSA scenario, and the on-shift staff are not burdened (tested) with multiple classifications.

Event scenarios that require escalation of the ECL prior to ERO augmentation are included in drills and exercises for the on-shift ERO. Technology, process and procedure enhancements to classification, notification and PAR development (such as Emergency Response Notification for Incidents and Events (ERNIE), ERDS, EAL matrix, PAR flowcharts, etc.) have simplified response activities and enhanced the effectiveness and efficiency of task performance. The on-shift Classification Advisor position's ability to perform second checks specifically benefits from these advancements such that continuation of their ERO related tasks from 60 to 90 minutes is not a burden.

All Initiating Conditions (ICs) need to be demonstrated within the 8-year cycle. All Unusual Event and Alert level ICs are preformed from the Control Room. Thus, the opportunities for the on-shift Classification Advisor to demonstrate the ability to perform emergency and operations responsibilities are provided multiple times over the 8-year cycle.

The demonstration and evaluation of the on-shift Classification Advisor to perform their emergency plan functions is continuously evaluated during emergency planning drills/exercises and operations training simulator sessions. Various scenarios are used to evaluate the on-shift Classification Advisor's ability to perform the following emergency planning functions, technical specification responsibilities and operations oversight.

Operations training simulator sessions test and evaluate the on-shift Classification Advisor's ability to effectively and efficiently perform all required functions / responsibilities until the event is stabilized (session is complete); this in some circumstances is greater than the 90 minutes ERO response time. Note – there is no minimum required length of time for the training sessions.

Licensed Operator Continuing (LOR) training periodically has scenarios that extend to 90 minutes without augmented ERO involvement. For example, a training scenario is performed on a periodic basis to ensure that a FLEX Beyond Design Basis External Event can be mitigated by the minimum on-shift staff. The FLEX scenario assumes that the ERO will not be on site to provide support for a minimum of 6 hours. While this is covered under 10 CFR 50.155 and not Appendix E, the example is given as a major event where augmented ERO response is not provided while the site compliment is under heavy demand for action to mitigate the event.

NextEra Energy has added a drill/exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for at least 90 minutes. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement for the TSC Classification Advisor minimum staff ERO position does not impact the capability or timeliness to perform the Emergency Classifications function or overburden the on-shift position.

On Shift impact of change from 60 to 90 minutes: The ECA position is the principal support to the Shift Manager or Site ED, depending on their location. The delay of the ECA arrival by an additional 30 minutes will have the Shift ECA performing the remote coordination support and ERNIE communications for the additional time. These functions are part and parcel to their function and practiced regularly.

The (Emergency) Classification Advisor role on shift as the principal assistant to the Shift Manager is enhanced due to technological improvements outlined above.

With the technological advances that ERNIE has given to the ECA, they are more able to provide co-equal level of knowledge and skill assistance to the Shift Manager for longer time periods due to them not being saddled with manual tasks of creating forms, briefing the shift communicator on the specific forms, and activating the ERO.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

# 2.2.3 [Potential RIE 2-3] ORO Communicator at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC ORO Communicator minimum staff ERO position that performs the State/County notifications aspect of the Communications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this position should occur within 60-minutes of an Alert ECL, or greater, and is intended to relieve the on-shift staff of this EP function. This function should consist of 2 staff members to fulfill the communication needs, at a minimum: 1 for the NRC and 1 for ORO notification and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

To adequately support the elimination or extension of the two 60-minute responders, the licensee should show that two on-shift positions are identified to fill the 60-minute responder's role to "Notify licensee, State, local and Federal personnel [and] maintain communication." The licensee should show that these positions are not assigned other tasks that may prevent the timely performance of their assigned notification or communication functions, as specified in the emergency plan. The licensee should discuss how communication technologies employed by the proposed on-shift staff will support timely, effective, and reliable notifications. Additionally, the communications technologies should be referenced in the emergency plan to ensure that future changes are reviewed using the RG 1.219 change process, as they were used as the basis for the proposed change.

Technology advancements of Emergency Response Notification for Incidents and Events (ERNIE) allows a streamlined process for ERO notification and ORO notification. Specifically, the technology advancements have enhanced initial notification to the ORO by using an electronic system that contacts the ORO warning points and emergency management staff via email, text and verbal computer-generated voice communications, thus eliminating the need for a communicator to perform the verbal portion of the initial notification.

ORO activation occurs from the site's warning points based upon the initial notification form information. The forms are negotiated and approved with OROs to provide information needed to make initial response decisions. As such, there should be minimal need for OROs to request additional information from the site communicators. ERNIE provides the site with validation that the information has been received by the OROs.

If any of the OROs need additional information prior to ERO activation (90 minutes), the NextEra control rooms are equipped with speaker and/or headset phones which aid them in the performance of the communication function. The technical advancement allows personnel to perform the communication task without negatively impacting the performance of other emergency plan or operations responsibilities.

NextEra Energy has added a drill/ exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for 90 minutes as a verification that the shift can perform their function with no assistance. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the State/County notifications aspect of the Communications function. The OROs concur with the NextEra Common Emergency Plan changes including the 90-minute ERO augmentation (refer to Enclosure 10).

On Shift impact of change from 60 to 90 minutes: The ORO communicator envisioned by NUREG-0654 R2 Table B1 was a manual intense process of reading off of paper notification forms and using one of many site telephone systems for external communications during the notification phase of an event. Additional functions would be communicating with state/county Emergency Operations Center staff to provide updates. As the (Emergency) Classification Advisor is responsible for ERNIE operations, they have taken on the below functions (via technology) of the ORO communicator:

- 1. ORO warning point call providing the warning point operators with information from the state/county notification form
- 2. Verification of message receipt.
- 3. Distribution of the notification form, usually by fax, to other ERO facilities and ORO warning points/EOCs

The offsite agencies receive annual training on EAL changes, so they know the basics of what the EALs are and what is on the notification forms.

One function that the ERO may take on is the non-critical communications with offsite agency leadership if an event is in progress. These communications are predominantly clarification questions that take 1-3 minutes to answer as their ERO yet in place. This does not add any significant burden on the shift staff. The timing of ORO response matches similarly to the site ERO response of 90 minutes. Each of the agencies have agreed to our 90 minute ERO response time as shown with the letters of support as part of the submittal.

If the offsite agency needs additional information, as discussed above, the control room can provide the information that is needed with minimum burden to the on-shift staff.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

# 2.2.4 [Potential RIE 2-4] ENS Communicator at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC ENS Communicator minimum staff ERO position that performs the NRC notifications aspect of the Communications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this position should occur within 60-minutes of an Alert ECL, or greater, and is intended to relieve the on-shift staff of this EP function. This function should consist of 2 staff members to fulfill the communication needs, at a minimum: 1 for the NRC and 1 for ORO notification and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

To adequately support the elimination or extension of the two 60-minute responders, the licensee should show that two on-shift positions are identified to fill the 60-minute responder's role to "Notify licensee, State, local and Federal personnel [and] maintain communication." The licensee should show that these positions are not assigned other tasks that may prevent the timely performance of their assigned notification or communication functions, as specified in the emergency plan. The licensee should discuss how communication technologies employed by the proposed on-shift staff will support timely, effective, and reliable notifications. Additionally, the communications technologies should be referenced in the emergency plan to ensure that future changes are reviewed using the RG 1.219 change process, as they were used as the basis for the proposed change.

Technology advancements using continuous live ERDS transmission and Emergency Response Notification for Incidents and Events (ERNIE) allows a streamlined process for NRC notification. Specifically, the technology advancements have enhanced the NRC Headquarters Operations Office (HOO) initial notification by using an electronic system that contacts the HOO.

The shift communicator is able to communicate immediately, not to exceed 1 hour, with the NRC HOO to provide real time information and an open line if desired. The NextEra control rooms are equipped with speakerphone and/or headset phones which aid the shift communicator in the performance of the communication function. The technical advancement allows personnel to perform the communication task without negatively impacting the performance of other emergency plan or operations responsibilities.

This technology allows for a single communicator to perform as the NRC communicator and have collateral duties throughout the additional 30 minutes until relieved by the TSC NRC Communicator.

NextEra Energy has added a drill/exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for 90 minutes as a verification that the shift can perform their function with no assistance. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the NRC notifications aspect of the Communications function.

On Shift impact of change from 60 to 90 minutes: The shift communicator role is primarily responsible for communicating with the NRC in the NEE designed scheme. ORO communications are handled by ERNIE (technology) and the ECA as outlined above in this document.

The shift communicator will then follow up with the NRC (after ERNIE delivers the first message electronically) immediately (not to exceed) 1 hour to validate receipt of the information, answer and answer any additional questions. The communicator will be available on the open line with the NRC as they are in the process of determining their response model to the event. The shift communicator being on the open line with the NRC for an additional 30 minutes will prevent them from being added back into the response pool; this delay was validated during the staffing study as the communicator was used in their task for 120 minutes. All other shift staff were capable of responding with no delays.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

## 2.2.5 [Potential RIE 2-5] TSC RP Coordinator at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC RP Coordinator minimum staff ERO position that performs the Supervision of Radiation Protection Staff and Site Radiation Protection function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

This function is important for effective emergency response to a radiological event because the management of RP resources, and the assistance this position provides the Emergency Coordinator, is crucial for response to radiological events. Radiological events can be very significant and constantly evolving and require significant expertise in radiation and radiological consequences. The evaluation of radiological events, and the development of effective protective action recommendations, requires this expertise to support the Emergency Coordinator in making these decisions. This position is also responsible for the direction and protection of FMTs. The augmentation (relief) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC.

The TSC Radiation Protection Coordinator relieves the Shift Manager of the Supervision of Radiation Protection Staff and Site Radiation Protection function.

On-shift radiation protection personnel respond to abnormal radiological conditions, including Area Radiation Monitor and Process Radiation Monitor alarms, in accordance with RP procedures and report their actions and information to the Shift Manager, with little or no required supervision. Other on-shift radiation protection personnel emergency functions/responsibilities are performed without the need for direct supervision of the Shift Manager.

Technology and process enhancements in radiation protection including dosimetry and personnel monitoring have reduced the on-shift RP task burden by allowing operations and other non-RP shift personnel to perform most activities without the need for dedicated RP coverage. Thus, the need for the Shift Manager to coordinate RP coverage activities is significantly reduced.

The 90-minute response for OSC maintenance and radiation protection personnel credits the enhancement of the NextEra FLEX equipment and strategies. By accounting for FLEX equipment and strategies that eliminate or prolong the onset of core damage and any radiological release of activity the RP challenges are simplified and the need for a 60 minute radiation protection personnel response, and thus a 60 minute Radiation Protection Supervision response is diminished. Coordination of RP supervision response time with full TSC and OSC augmentation provides for a less complicated transition of responsibilities.

NextEra Energy has added a drill/ exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for 90 minutes as a verification that the shift can perform their function with no assistance. This includes the Shift Manager directing and supervising RP functions and activities.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the Supervision of Radiation Protection Staff and Site Radiation Protection function.

On Shift impact of change from 60 to 90 minutes: The Shift Manager is overall responsible for the supervision of RP staff and site radiation protection function.

With the Site RP Coordinator filling both Table B1 roles of Site RP Coordinator and OSC RP Supervisor, this position has responsibility of providing direction to RP staff and will thus be filled with dayshift RP management, supervisors, analysts, and staff.

While these personnel do bring a skillset that is matched only by the RPT on shift, they do provide additional knowledge and experience that the shift manager may not have in their arsenal. To mitigate this issue, throughout the years emergency operations procedures have been enhanced by incorporation of the most recent revisions of PWR Owner's Group guidance, this has greatly aided the shift RP response to include specific direction on directing surveys and other RP functions. The AOP/EOP procedure sets have specific guidance for direction and control of RP/QI resources during an event. The shift manager has the authority to provide immediate dose extensions for life saving, facility saving, or prevention/mitigation of release. This decision is informed by the rest of the operating crew and procedure sets. This again is part and parcel of the SM requirements and is not an undue burden for the additional 30 minutes.

Performing a comparative task analysis (refer to Analysis 1) between the Shift Manager and the Site RP Coordinator, the tasks are same/ similar between the SM and SRPC. Where there is a gap is with experience. Experience cannot be mitigated with training as the knowledge requirements for the positions are same/ similar. Experience is mitigated through procedure use and adherence. As outlined above, all NEE sites have AOP/EOP sets that are based off most recent PWR Owner's guidance which incorporates industry best practices, including RP direction.

# 2.2.6 [Potential RIE 2-6] Radiation Protection Personnel at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the radiation protection personnel minimum staff ERO positions that perform the Radiation Protection function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for augmenting radiation protection personnel states that:

While not all Alert ECLs (or lower) have radiological consequences, licensees should develop their ERO staffing plans for a worst-case scenario from a radiological risk perspective, i.e., an event which results in the immediate (within 60-minutes) loss of 2 or more fission product barriers leading to significant and unknown radiological conditions. The augmentation (support) of this position should occur in two stages: within 60 minutes of an Alert ECL or greater, 3 additional qualified RP staff should be available, and within 90 minutes of an Alert ECL, or greater, an additional 3 additional qualified RP staff should be available, and both are typically staffed in the OSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Radiation protection personnel perform multiple roles during normal and emergency plant operations. These roles include access control, personnel monitoring, and dosimetry, in addition to HP coverage for repair and corrective actions, search and rescue, first aid, and firefighting during emergency response operations. Per the quidance in Table B-1 of NUREG-0654, there should be two augmented responders at 60 minutes for the major task of "Radiation Protection." To adequately support an extension in response timing of the two radiation protection 60-minute responders to 90 minutes, the licensee should show that the on-shift HP staffing includes as a minimum, four HP technicians in total for the site. The extra HP technicians are needed for in-plant protective actions for the other personnel added to the on-shift staffing to compensate for the extension in augmentation time, and to assess any offsite releases of radioactive materials. Additionally, the licensee request should demonstrate that on-shift HP technicians will be relieved of the need to perform access control, personnel monitoring, and dosimetry-related tasks, thereby freeing these personnel to cover vital response activities (e.g., HP coverage for repair and corrective actions, search and rescue, first aid, and firefighting). NRC staff will consider whether the basis for the justification includes the availability of installed area, process, airborne and effluent radiation monitors, automated systems and information technology solutions, and enhanced work processes. The licensee should include supporting tools and processes that will be considered such as portal monitors, self-alarming dosimeters, and automated access control systems for the RCA that maintain active radiation work permits that are readily available if an emergency is declared (e.g., the system verifies qualifications, dose margins, and access requirement).

Three (3) RP Technician and two (2) RP Qualified Individual 90-minute minimum staff ERO positions report to the Lead OSC Supervisor and provide radiation protection support.

Through equipment, process, and training enhancements the on-shift staff can initially respond to Design Basis and Beyond Design Basis (BDB) events without the support of an augmented ERO. As codified by 10 CFR 50.155, NextEra FLEX equipment provides the on-shift staff with additional resources when installed plant equipment is lost or damaged. Generally, FLEX provides portable backup equipment onsite that can be used to supplement or replace installed plant equipment in maintaining long-term core cooling, spent fuel cooling, and containment integrity. Movement of FLEX equipment, including installation into plant systems and its operations (electrical, fluid, etc.) is performed by on-shift personnel.

Due to the availability of FLEX equipment, NextEra stations have diverse protection against loss of ECCS capability and other systems, which provides a basis for determination that no immediate ECCS repair and corrective actions are likely necessary for on-shift personnel prior to augmentation of maintenance personnel. The FLEX/BDB process and equipment, and the operating emergency procedures (EOP, AOP, etc.) are designed to be implemented with the minimum shift staff. By accounting for FLEX equipment and strategies that eliminate or prolong the onset of core damage and any radiological release of activity the RP challenges are simplified and the need for a 60 minute radiation protection personnel response is diminished.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

On Shift impact of change from 60 to 90 minutes: Shift RP functions are designed around requirements in AOP/EOP procedures and validated against FLEX demands. With the RP/QI personnel on shift, this allows for multiple shift "teams" working in the Radiologically Controlled Area performing steps needed in the AOP/EOP procedures. Changing radiological conditions are an integral part of operations functions in these procedure sets and the operators are trained to expect those conditions as they are realigning systems. As the RP/QIs are matched with the number of teams needed for response, having those personnel continue performing that function without additional RP response is appropriate.

ERO RP response is going to be focused on ERO responders – which is what they are staffed based on. Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

#### 2.2.7 **[Potential RIE 2-7]** Both Offsite FMTs at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the FMT Technician/FMT Driver minimum staff ERO positions that perform the offsite field monitoring aspect of the Field Monitoring Teams function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

- An offsite FMT should be staffed, consisting of a monitor and a driver. This offsite FMT is responsible for locating, monitoring, and tracking a radioactive plume, as well as obtaining environmental samples as necessary (air, water, vegetation, etc.). This team should be staffed within 60-minutes of an Alert ECL, or greater, in order to be ready to respond to a radiological release, or to detect radiation in the field thus confirming and quantifying the release. This supports the applicable PAR decision-makers in developing effective PARs.
  - i. The monitor should be qualified to assess radiation and contamination levels but need not be an ANSI qualified RP Technician as long as the FMT is under the direct supervision of senior staff in the TSC or EOF.
  - iii. The driver should be knowledgeable about the vehicle and the proposed routes to be traversed.
- Another offsite FMT should be staffed, consisting of a monitor and a driver. This offsite FMT is also responsible for locating, monitoring, and tracking a radioactive plume, as well as obtaining environmental samples (air, water, vegetation, etc.). This team should be staffed within 90-minutes of an Alert ECL, or greater, in order to be ready to respond to a radiological release, or to detect radiation in the field thus confirming and quantifying the release. This supports the applicable PAR decision-makers in developing effective PARs. An additional 30-minutes in response is acceptable in that this second FMT is a backup to the first FMT, and while both FMTs are expected to respond to an event to better coordinate radioactive plume tracking action(s), allowing for an additional 30-minutes provides licensees some flexibility in staffing this ERO function without compromising the reasonable assurance finding in accordance with 10 CFR 50.47(a).
  - i. The monitor should be qualified to assess radiation and contamination levels but need not be an ANSI qualified RP Technician as long as the FMT is under the direct supervision of senior staff in the TSC or EOF.
  - iii. The driver should be knowledgeable about the vehicle and the proposed routes to be traversed.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Per the guidance of NUREG-0654, Table B-1, there should be four augmented responders at 60 minutes—two for off-site surveys, one for on-site surveys, and one for in-plant surveys. To adequately support an extension of these responders to 90 minutes, the licensee should show that the on-shift HP staffing includes a minimum of four HP technicians in total for the site. The licensee should demonstrate that two HP technicians, in excess of the number evaluated previously for extending the 30-minute responders, are available for in-plant protective actions for the other maintenance personnel that need to be added to the on-shift staffing to compensate for the extension in augmentation time for the major task of "Repair and Corrective Actions," and to perform surveys to assess any off-site release of radioactive materials.

NextEra off-site Field Monitoring Team augmentation is 90 minutes for both teams versus one team at 60 minutes and one team at 90 minutes.

FLEX equipment and strategies eliminate or prolong the onset of core damage and any radiological release of activity, and thus simplify the RP challenges and diminish the need for a 60 minute Field Monitoring Team response.

The 60 minute response basis for the first off-site Field Monitoring Team is to be ready to respond to a radiological release, or to detect radiation in the field for any ECL at an Alert or above. NextEra provides dedicated vehicles and equipment to facilitate the rapid deployment of personnel upon their arrival.

- Vehicles are maintained and fueled such that the Field Monitoring Team Driver is only required to perform a quick walk-around safety check before operating.
- Equipment/supply kit inventories are administratively maintained so that Field Monitoring Team personnel are not required to verify contents or perform lengthy equipment checks.
- Vehicles and equipment are stored together in a location that facilitates rapid deployment outside the Protected Area.
- Initial Field Monitoring Team deployment strategy locates personnel in downwind areas near the site boundary prior to a release that promptly supports EAL identification and PAR determination.

This pre-staging and readiness of Field Monitoring Team resources significantly reduces the time it takes personnel to be ready to respond to and identify a radiological release, thus also facilitating a 90 versus 60 minute augmentation response time.

On Shift impact of change from 60 to 90 minutes: FMT function not being available for offsite response at 60 minutes is covered by NEI 99-01 revision 6 EALs that incorporate "Table R-1" values, which are pre-calculated effluent monitor readings that equate to worse case release value that allows for the shift to make a determination without the need for dose assessment or FMTs.

Unmonitored releases are evaluated using in plant area radiation monitors and plant physical responses (containment pressure erratic indications, flow rates not as expected, etc.) which would trigger the operating crew to look for leaks. Direct radiation monitor readings of the unmonitored release, if needed, would be completed by competent operations staff or RP staff. On the surface this may look like an additional function on the shift staff; however, it is standard operations response to look for leaks and abnormalities as events unfold to ensure that they are in the appropriate response procedures.

Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

#### 2.2.8 [Potential RIE 2-8] OSC Supervisors at 90 minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the Lead OSC Supervisor and FIN Supervisor minimum staff ERO position that performs the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan 60-minute ERO response time requirement for the Lead OSC Supervisor and Operations Supervisor and the NUREG-0654 R2 60-minute ERO response time guidance for the Lead OSC Supervisor.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

An Electrical Supervisor, a Mechanical Supervisor, an I&C Supervisor, and an RP Supervisor should be staffed within 90-minutes of an SAE ECL, or greater, and is typically staffed in the OSC. The OSC Supervisor can effectively manage the maintenance resources for the additional 30-minutes prior to the specific craft (mechanical, electrical, or I&C) respond, as demonstrated through drills and exercises, without compromising the staff's reasonable assurance finding in accordance with 10 CFR 50.47(a).

Operations staff are currently trained with basic troubleshooting skills for support of all EOP and abnormal response procedure actions. Supervision of these actions are performed by the Shift Manager and Unit Supervisors regardless of augmented ERO staffing. There is no need for the ERO to relieve the shift of this responsibility.

The Flex/B.5.b process and equipment, and the operating emergency procedures (EOP, AOP, etc.), are designed to be implemented by the minimum on-shift staff. Through technological and process enhancements, the on-shift staff can cope with an event (Design Basis and Beyond Design Basis) initially without an ERO as analyzed in detail for other non-EP regulatory requirements. With FLEX/B.5.b processes and equipment codified by 10 CFR 50.155 into plant response procedures, on-shift personnel have the capability for mitigating core damage from design or beyond design basis events.

Based on this, OSC personnel are used primarily for repair activities, with operations personnel focusing on mitigating activities per the EOPs and other event procedures.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the Supervision of Repair Team Activities function.

On Shift impact of change from 60 to 90 minutes: In NUREG 0654 revision 2 table B1, the Lead OSC Supervisor during the first 30 minutes of response is dedicated to identifying any craft maintenance needs and deploying them as required to get started on repair team needs. After that time, the Craft Supervision comes in to take over the planning of repair tasks.

As described above the OSC supervision is not necessary for the initial response, the on-shift staff have the capability of performing emergency maintenance functions — overriding Air operated/ motor operated valves due to recalcitrant valve actions, breaker opening/ closing, breaker resets, and taking channels out of service that are causing protection systems to function abnormally. These tasks are part of the standard operations function and are trained/ drilled regularly through continuing training programs. The shift manager is overall in charge of operations response as stated throughout this document and this function is no different. Most of these functions are procedurally directed or can be deduced from training/ experience and directed by the control room for response. Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no staffing requirements for particular skillsets to be present in this position. As such, there are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

# 2.2.9 [Potential RIE 2-9] OSC Craft at 90 minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the Mechanic and Electrician craft minimum staff ERO positions that perform the Repair Team Activities function.

This change deviates from the current emergency plan 60-minute ERO response time requirements and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

... a minimum number of maintenance personnel should respond to an event as part of the ERO, with more personnel available on an as-needed basis depending on the event. The augmentation (support) of the electrician and mechanic positions should occur within 60-minutes of an Alert ECL, (or greater), and is typically staffed in the OSC. The augmentation (support) of the I&C position should occur within 90-minutes of an Alert ECL, or greater, and is typically staffed in the OSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Table B-1 of NUREG-0654 calls for the addition of one "Mechanical Maintenance," one "Rad Waste Operator," and an added "Electrical Maintenance" person within 60 minutes. To adequately support an extension of the response time for these responders, the licensee should demonstrate that the responsibilities of these positions can be covered with on-shift staff or earlier responders.

Operations Emergency Operating Procedures have been developed to provide direction for a wide range of events described in the FSAR that uses operators to place the plant in a safe and stable condition. Maintenance personnel are not called upon in the response stage of an event as repair activities are taken after immediate EOP response actions.

Through equipment, process, and training enhancements the on-shift staff can initially respond to Design Basis and Beyond Design Basis (BDB) events without the support of an augmented ERO. As codified by 10 CFR 50.155, NextEra FLEX equipment provides the on-shift staff with additional resources when installed plant equipment is lost or damaged. Generally, FLEX provides portable backup equipment onsite that can be used to supplement or replace installed plant equipment in maintaining long-term core cooling, spent fuel cooling, and containment integrity. Movement of FLEX equipment, including installation into plant systems and its operations (electrical, fluid, etc.) is performed by on-shift personnel.

Due to the availability of FLEX equipment, NextEra stations have diverse protection against loss of ECCS capability and other systems, which provides a basis for determination that no immediate ECCS repair and corrective actions are likely necessary for on-shift personnel prior to augmentation of maintenance personnel. The FLEX/BDB process and equipment, and the operating emergency procedures (EOP, AOP, etc.) are designed to be implemented with the minimum shift staff. By accounting for FLEX equipment and strategies that eliminate or prolong the need for equipment and systems repair the maintenance challenges are simplified and the need for a 60 minute craft personnel response is diminished.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

On Shift impact of change from 60 to 90 minutes: In NUREG 0654, Rev. 2, Table B1, the craft function during the first 30 minutes of response is dedicated to identifying any craft maintenance needs and reporting that information to the Lead OSC Supervisor to develop priorities on repair team needs. After that time, the Craft Supervision comes in to take over the planning of repair tasks.

Shift operations staff have the capability of performing emergency maintenance functions – overriding Air operated/ motor operated valves due to recalcitrant valve actions, breaker opening/ closing, breaker resets, and taking channels out of service that are causing protection systems to function abnormally. These tasks are part of the standard operations function and are trained/ drilled regularly through continuing training programs. The shift manager is overall in charge of operations response as stated throughout this document and this function is no different. Most of these functions are procedurally directed or can be deduced from training/ experience and directed by the control room for response.

While the early identification of repair team needs will not be directly addressed by the field operations staff, the ability of the shift to perform emergency maintenance functions will identify which pieces of equipment are truly unavailable which will be reported to the Shift Manager and to the ERO through the SM/SED turnover process. Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

While there are skills in the OSC Mechanic and OSC Electrician that are not 100% present in shift staff – the skills required for the 60 to 90 minute gap are available on shift to perform emergency maintenance functions and identify equipment that is out of service.

## 2.2.10 [Potential RIE 2-10] Security Liaison at 90 minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the Security Liaison minimum staff ERO position that perform the Security function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The licensee's Security Force is controlled and maintained by the licensee's NRC-approved physical security plan and does not need to be reflected in the Emergency Plan. However, the establishment of a Security Liaison position in the TSC is advantageous to ensure effective coordination between the security force and the ERO, particularly for events where offsite resources are necessary as well as for security related events and site personnel accountability. The augmentation (support) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed by a Security Liaison in the TSC to coordinate security-related activities with that of the ERO.

The site-specific Physical Security Plan (PSP) defines on-shift security staffing. This PSP staffing supports initial event response, either security or emergency plan related. The Security Shift Supervisor communicates directly with the Shift Manager informing them of security related actions and conditions. This communication does not change with the augmentation of the ERO.

Following the transfer of command and control, the Security Liaison position coordinates security and emergency related communications and response actions between the Site Emergency Director and the security force. The Security Liaison position provides communication and coordination resources that are not needed until the TSC and OSC are augmented at the 90 minute point in time.

On Shift impact of change from 60 to 90 minutes: As stated above, the PSP defines the on-shift security staff to support the initial response and the Security Liaison is not necessary until the TSC/OSC are staffed. Therefore, by aligning the Security Liaison's response time to the TSC/OSC, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by security shift staff in adjusting the response from 60 to 90 minutes.

#### 3.0 ERO KEY FUNCTION ANALYSIS

Each sub-section below lists the NUREG-0654 R2 Table B-1 tasks associated with the key function; and then provides, as applicable, a staffing comparison table, Emergency Plan Change Assessment section and NUREG-0654 R2 Alignment Assessment section for the on-shift and minimum staff ERO positions.

- The Emergency Plan Change Assessment section evaluates any difference in ERO staffing between the current emergency plan and the proposed emergency plan for the key function. It includes the basis for the original and proposed staffing and justification for the change as applicable. The ERO Task Analysis provides further detail and disposition of the tasks assigned to the ERO positions.
- The NUREG-0654 R2 Alignment Assessment section evaluates any difference in ERO staffing between NUREG-0654 R2 and the proposed emergency plan for the particular key function to determine conformance. It also states whether the tasks assigned to the ERO position are aligned with the tasks specified for the key function in NUREG-0654 R2.

# 3.1 Key Function: Command and Control

The Command and Control function includes the following NUREG-0654 R2 Table B-1 tasks:

- Provide overall ERO command and control.
- Approve emergency classification levels (ECL) and/or protective action recommendations (PAR).
- Authorize personnel dose extensions.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

### 3.1.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Shift Manager	(1) Shift Manager	(1) Operations Shift Manager

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

#### 1. Emergency Plan Change Assessment

The current PBN emergency plan assigns the Shift Manager on-shift ERO position to the Command and Control function.

The proposed NextEra Common emergency plan assigns the Shift Manager on-shift ERO position to the Command and Control function.

No functional changes have been made to the on-shift minimum staff ERO positions for the Command and Control function.

#### 2. NUREG-0654 R2 Alignment Assessment

The current PBN emergency plan assigns the Shift Manager on-shift ERO position to the Command and Control function.

The proposed NextEra Common emergency plan assigns the Shift Manager on-shift ERO position to the Command and Control function.

In the proposed NextEra Common emergency plan the Shift Manager on-shift ERO position is equivalent to the NUREG-0654 R2 guidance for the on-shift Command and Control function.

## 3.1.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
Emergency Coordinator (TSC)	Site Emergency Director (TSC)	(1) Emergency Coordinator
		(TSC at Alert or higher)
Emergency Director (EOF)	None	(1) Emergency Director (EOF
		at SAE or higher)

# 1. Emergency Plan Change Assessment

The current emergency plan assigns the Emergency Coordinator in the TSC to initially assume Command and Control from the Shift Manager and the Emergency Director in the EOF to assume Command and Control function once the EOF is staffed and activated.

The proposed emergency plan assigns one (1) Site Emergency Director minimum staff ERO position in the TSC at the Alert emergency classification level to the Command and Control function.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one TSC Emergency Coordinator minimum staff ERO position at the Alert emergency classification level and one EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level for the Command and Control function.

The proposed emergency plan assigns one (1) Site Emergency Director minimum staff ERO position in the TSC at the Alert emergency classification level to the Command and Control function.

[Potential RIE 1-1] The proposed emergency plan does not assign an EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level for the Command and Control function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Command and Control function from two (2) to one (1).

This change deviates from the current emergency plan minimum ERO staffing requirements and the NUREG-0654 R2 minimum staff ERO guidance.

# 3.2 Key Function: Emergency Classifications

The Emergency Classifications function includes the following NUREG-0654 R2 Table B-1 task:

• Evaluate plant conditions and recommend emergency classifications.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

### 3.2.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
STA or	(1) Shift Classification Advisor (a)	(1) Emergency
Operating Supervisor (OS) (a)		Classification Advisor**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns for the STA or an Operating Supervisor (OS) as on-shift ERO positions with the collateral responsibility to the Emergency Classifications function.

The proposed emergency plan assigns a Classification Advisor on-shift ERO position as a collateral responsibility to the Emergency Classifications function. STAs or any SRO may be qualified to perform this function.

There is no impact or alteration of the current emergency plan requirements.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns the Classification Advisor on-shift ERO position as a collateral duty to the Emergency Classifications function.

The proposed emergency plan assigns the Classification Advisor on-shift ERO position as a collateral duty to the Emergency Classifications function.

The proposed emergency plan on-shift ERO staffing level meets the NUREG-0654 R2 guidance for the Emergency Classifications function.

# 3.2.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) TSC Emergency	(1) TSC Emergency	(1) TSC Emergency
Classification Advisor	Classification Advisor	Classification Advisor

# 1. Emergency Plan Change Assessment

The current emergency plan assigns an Emergency Classification Advisor minimum staff ERO position for the Emergency Classifications function.

The proposed emergency plan assigns an Emergency Classification Advisor minimum staff ERO position for the Emergency Classifications function.

There is no impact or alteration of the current emergency plan requirements.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one TSC Emergency Classification Advisor minimum staff ERO position for the Emergency Classifications function.

The proposed emergency plan assigns one TSC Emergency Classification Advisor minimum staff ERO position for the Emergency Classifications function.

The major task is aligned with that stated in NUREG-0654 R2 guidance.

## 3.3 Key Function: Communications

The Communications function includes the following NUREG-0654 R2 Table B-1 task:

Communicate ECLs and PARs to OROs, including the NRC.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

# 3.3.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Communicator (a)	(1) Shift Communicator (a)	(1) Communicator**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

### 1. Emergency Plan Change Assessment

The current emergency plan assigns one individual to serve as a shift Communicator. During emergency situations, this individual reports to the SM and performs communication and notification functions as assigned. The Communicator will keep an open line of communication with the NRC, as requested, and should not have any other event response duties that interfere with the communicator function once this open line is established. This position may be filled by a qualified OS, AO, or STA as a collateral duty.

The proposed emergency plan assigns a Shift Communicator (typically the Shift Manager) to fill the Communications function, as a collateral duty.

No functional changes have been made to the on-shift ERO positions for the Communications function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns an on-shift position to the Communications function as a collateral duty.

The proposed emergency plan assigns a Shift Communicator (typically the Shift Manager position) to the Communications function as a collateral duty.

The proposed emergency plan Communicator on-shift ERO collateral duty meets the NUREG-0654 R2 guidance for the Communications function.

# 3.3.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) TSC ORO Communicator	(1) ORO Communicator (TSC)	(1) ORO Communicator (TSC at Alert or higher)
None	None	(1) ORO Communicator (EOF at SAE or higher)
(1) TSC NRC Communicator	(1) ENS Communicator (TSC)	(1) NRC Communicator (TSC at Alert or higher)
(1) EOF NRC Communicator	None	One Communicator staffed for NRC Communications if needed.

# 1. Emergency Plan Change Assessment

# A. ORO Notifications (State/County)

The current emergency plan assigns one TSC ORO Communicator minimum staff ERO position for the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator minimum staff ERO position at the Alert emergency classification level to the Communications function.

# B. NRC Notifications

The current emergency plan assigns one TSC NRC Communicator and one EOF NRC Communicator minimum staff ERO positions for the Communications function.

The proposed emergency plan assigns one (1) TSC ENS Communicator as a minimum staff ERO position at the Alert emergency classification level for the Communications function.

### 2. NUREG-0654 R2 Alignment Assessment

### A. ORO Notifications (State/County)

NUREG-0654 R2 assigns one (1) TSC ORO Communicator minimum staff ERO position at the Alert emergency classification level and one (1) EOF ORO Communicator minimum staff ERO position at the Site Area Emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator minimum staff ERO position at the Alert emergency classification level to the Communications function.

### B. NRC Notifications

NUREG-0654 R2 assigns one (1) TSC NRC Communicator minimum staff ERO position to the ENS aspect of the Communications function.

The proposed emergency plan assigns one (1) TSC ENS Communicator minimum staff ERO position to the ENS aspect of the Communications function.

The proposed emergency plan TSC ENS Communicator minimum staff ERO position meets the NUREG-0654 R2 guidance for the ENS aspect of the Communications function.

[Potential RIE 1-2] The proposed emergency plan does not provide an EOF Offsite Communicator minimum staff ERO position at the Site Area Emergency classification level for the Communications function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the ORO aspect of the Communications function from two (2) to one (1).

This change deviates from the NUREG-0654 R2 minimum staff ERO position guidance.

[Potential RIE 1-3] The proposed emergency plan does not provide for an EOF NRC Communicator for the Communications function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the NRC aspect of the Communications function from two (2) to one (1).

This change deviates from the current plan minimum staff ERO requirement.

## 3.4 Key Function: Supervision of RP Staff and Site Radiation Protection

The Supervision of Radiation Protection Staff and Site Radiation Protection function includes the following NUREG-0654 R2 Table B-1 tasks:

- Evaluate and assess plant and offsite radiological data in the development of onsite protective actions and offsite PARs.
- Recommend onsite protective actions and offsite PARs to the applicable decisionmaker.
- Direct all radiation protection activities, including Field Monitoring Team (FMT) direction.
- Provide relevant information to applicable communicators who are communicating offsite PARs to OROs.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

# 3.4.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Curren	t E-Plan	Proposed E-Plan	NUREG-0654 R2
(1)	Shift Manager(a)	(1) Shift Manager(a)	(1) Operations Shift Manager*

<sup>(</sup>a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.

Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns the Shift Manager to provide Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns the Shift Manager on-shift ERO collateral duty to the Supervision of RP Staff and Site Radiation Protection function.

No functional changes have been made to the on-shift ERO position for the Supervision of Radiation Protection Staff and Site Radiation Protection function. Although not specifically stated in the current emergency plan, the Shift Manager has overall supervision/management of all on-shift positions.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns the Supervision of Radiation Protection Staff and Site Radiation Protection function to the Shift Manager as a collateral duty.

The proposed emergency plan assigns the Supervision of Radiation Protection Staff and Site Radiation Protection function to the Shift Manager as a collateral duty.

The proposed emergency plan meets the NUREG-0654 R2 guidance for assigning the Shift Manager position to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

# 3.4.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Site Radiation Protection Coordinator	(1) TSC RP Coordinator (TSC)	(1) TSC Site Radiation Protection Coordinator (TSC at Alert or higher)
(1) EOF Radiation Protection Manager	(1) EOF RP Coordinator (EOF)	(1) EOF Radiation Protection Manager (EOF at SAE or higher)

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Site Radiation Protection Coordinator and one (1) EOF Radiation Protection Manager minimum staff ERO positions staffed at the Alert level for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one (1) TSC Radiation Protection Coordinator and one (1) EOF Radiation Protection Coordinator minimum staff ERO positions for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

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No functional changes have been made to the minimum staff ERO positions for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 guidance assigns one (1) TSC RP Coordinator minimum staff ERO position and one (1) EOF RP Manager minimum staff ERO position staffed at the alert level for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one (1) TSC Radiation Protection Coordinator and one (1) EOF Radiation Protection Coordinator minimum staff ERO positions for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan minimum staff ERO positions meet NUREG-0654 R2 guidance for the Supervision of Radiation Protection Staff and Site Radiation Protection function at the Alert emergency classification level.

### 3.5 Key Function: Dose Assessments / Projections

The Dose Assessments / Projections function includes the following NUREG-0654 R2 Table B-1 task:

Perform Dose Assessments / Projections and provide input to applicable PAR decision-maker.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

### 3.5.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Control Room Dose Assessor(a)	(1) Shift Dose Assessor(a)	(1) Dose Assessment / Projections Staff**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns the Dose Assessments / Projections function as a collateral duty to any qualified individual on-shift.

The proposed emergency plan assigns a Dose Assessor on-shift ERO collateral duty for the Dose Assessments / Projections function, which can be performed by any qualified on-shift individual (typically, the RPQI positions are task-qualified to perform dose assessment).

No functional changes have been made to the on-shift ERO position for the Dose Assessments / Projections function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 guidance identifies the on-shift Dose Assessor ERO position as a collateral duty for the Dose Assessments / Projections function.

The proposed emergency plan identifies the on-shift Dose Assessor ERO position as a collateral duty for the Dose Assessments / Projections function.

The proposed emergency plan assignment of the on-shift Dose Assessor ERO position as a collateral duty meets NUREG-0654 R2 guidance for the on-shift Dose Assessments / Projections function.

### 3.5.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) TSC Dose Assessor	(1) Remote Dose Assessor (Remote)	(1) Dose Assessment/ Projection Staff (TSC at Alert or higher)
(1) EOF Dose Assessor	(1) EOF Dose Assessor (EOF)	(1) Dose Assessment/ Projection Staff (EOF at SAE or higher)

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC Dose Assessor and one (1) EOF Dose Assessor minimum staff ERO position for the Dose Assessments / Projections function.

The proposed emergency plan assigns one (1) EOF Dose Assessor and one (1) Remote Dose Assessor as minimum staff ERO positions for the Dose Assessments / Projections function.

No functional change has been made to the two (2) Dose Assessment minimum staff ERO position for the Dose Assessments / Projections function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC Dose Assessor and one (1) EOF Dose Assessor minimum staff ERO positions for the Dose Assessments / Projections function.

The proposed emergency plan assigns one (1) Remote Dose Assessor and one (1) EOF Dose Assessor minimum staff ERO positions to the Dose Assessments / Projections function.

The proposed emergency plan Dose Assessor minimum staff ERO positions meet the NUREG-0654 R2 guidance for the Dose Assessments / Projections function.

#### 3.6 Key Function: Radiation Protection

The Radiation Protection function includes the following NUREG-0654 R2 Table B-1 tasks:

- Provide qualified radiation protection coverage for responders accessing potentially unknown radiological environments during emergency conditions.
- Provide in-plant surveys.
- Control dosimetry and radiologically controlled area access.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

# 3.6.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(2) Radiation Protection	(1) RP Technician	(2) Radiation Protection
Technologist	(1) RP Qualified Individual	Personnel

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns two (2) on-shift Radiation Protection Technologist to the Radiological Protection function.

The proposed emergency plan assigns one (1) RPT and one (1) RP Qualified Individual on-shift ERO positions to the Radiation Protection function.

No functional changes have been made to the on-shift ERO positions for the Radiation Protection function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns two (2) on-shift Radiation Protection Personnel to the Radiological Protection function.

The proposed emergency plan assigns one (1) RPT and one (1) RP Qualified Individual on-shift ERO positions to the Radiation Protection function.

The proposed emergency plan on-shift RPT and RP Qualified Individual meet the NUREG-0654 R2 guidance for the Radiation Protection function.

[Potential RIE 1-4] The proposed emergency plan allows collateral duty assignments to be given to radiation protection personnel when performing the Radiation Protection function. Specifically, this change allows radiation protection personnel to perform the Dose Assessment /Projections function and support other on-shift actions when not assigned a response activity.

This change deviates from the NUREG-0654 R2 on-shift staff ERO position guidance.

#### 3.6.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(6) Radiation Protection	(3) RP Technician	(6) Radiation Protection
Technician	(2) RP Qualified Individual	Personnel

# 1. Emergency Plan Change Assessment

The current emergency plan provides six (6) RP Technicians as the minimum staff ERO assigned to the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals as the minimum staff ERO assigned to the Radiation Protection function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides six (6) RP Technicians as the minimum staff ERO assigned to the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals as the minimum staff ERO assigned to the Radiation Protection function.

**Potential RIE 1-5]** The proposed emergency plan reduces the number and qualifications of minimum staff ERO positions for the Radiation Protection function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Radiation Protection function from six (6) in the current emergency plan and in NUREG-0654, to five (5) in the proposed emergency plan, consisting of three (3) RPTs and two (2) RP Qualified individuals that are task trained but not required to be ANSI equivalent RPTs.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

#### 3.7 Key Function: Field Monitoring Teams (FMTs)

The Field Monitoring Teams function includes the following task:

• Provide onsite (out of plant) and offsite surveys.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

### 3.7.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	Not applicable

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign the Field Monitoring Teams function to an on-shift position.

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The proposed emergency plan does not assign the Field Monitoring Teams function to an on-shift position.

No functional changes have been made to the on-shift ERO positions for the Field Monitoring Teams function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 does not assign the Field Monitoring Teams function to an on-shift position.

The proposed emergency plan does not assign the Field Monitoring Teams function to an on-shift position.

The proposed emergency plan is consistent with NUREG-0654 R2 guidance regarding the Field Monitoring Team function for the on-shift ERO.

# 3.7.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Onsite FMT Technician	None	(1) Onsite FMT Qualified individual
(1) Onsite FMT Driver		(1) Onsite FMT Driver
(2) Offsite FMT Technician	(2) FMT Technician	(2) Offsite FMT Qualified individual
(2) Offsite FMT Driver	(2) FMT Driver	(2) Offsite FMT Driver

#### 1. Emergency Plan Change Assessment

#### A. Onsite Field Monitoring

The current emergency plan assigns one (1) Onsite FMT Technician and one (1) Onsite FMT Driver minimum staff ERO positions for the FMTs function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

#### B. Offsite Field Monitoring

The current assigns two (2) FMT Technicians and two (2) FMT Drivers for minimum staff ERO positions for the FMTs function.

The proposed emergency plan assigns two (2) FM Technicians and two (2) FM Drivers for minimum staff ERO positions for the Field Monitoring Teams function

No functional change has been made to the four (4) Field Monitoring Team minimum staff ERO positions for the offsite field monitoring aspect of the Field Monitoring Teams function.

# 2. NUREG-0654 R2 Alignment Assessment

#### A. Onsite Field Monitoring

NUREG-0654 R2 assigns one (1) onsite Field Monitoring Team Technician as minimum staff ERO to the onsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

# B. Offsite Field Monitoring

NUREG-0654 R2 assigns two (2) offsite Field Monitoring Team Technicians and two (2) Field Monitoring Team Drivers minimum staff ERO members for the offsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan assigns two (2) offsite Field Monitoring Team Technicians and two (2) Field Monitoring Team Drivers minimum ERO members for the offsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan minimum staff ERO offsite Field Monitoring Team position staffing level meets the NUREG-0654 R2 guidance for the Radiation Protection function.

[Potential RIE 1-6] The proposed emergency plan does not staff the onsite field monitoring minimum staff ERO positions for the Field Monitoring Teams function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the onsite field monitoring aspect of the Field Monitoring Teams function from two (2) to zero (0).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

# 3.8 Key Function: Engineering

The Engineering function includes the following NUREG-0654 R2 Table B-1 tasks:

- Provide engineering coverage related to the specific discipline of the assigned engineer.
- Monitor and evaluate plant and event conditions.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

#### 3.8.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Shift Technical Advisor(a)	(1) Shift Technical Advisor(a)	(1) Core/Thermal Hydraulics Engineer*

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns the Engineering function to the STA as a collateral responsibility.

The proposed emergency plan assigns the Engineering function to the STA as a collateral responsibility.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns the Engineering function to a Core/Thermal Hydraulics Engineer as a collateral responsibility.

The proposed emergency plan assigns the Engineering function to the STA as a collateral duty.

The proposed emergency plan Shift Technical Advisor ERO position meets the NUREG-0654 R2 guidance for the on-shift Engineering collateral duty function.

# 3.8.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Core/Thermal Engineer (TSC)	(1) Reactor Engineer (Remote)	(1) Core/Thermal Hydraulics
(1) Electrical/I&C Engineer (OSC)	(1) Electrical/I&C Engineer (Remote)	(1) Electrical / Instrumentation and Control (I&C)
(1) Mechanical Engineer (OSC)	(1) Mechanical Engineer (Remote)	(1) Mechanical

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Core/Thermal Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as minimum staff ERO positions for the Engineering function.

The proposed emergency plan assigns one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer, as minimum staff ERO positions for the Engineering function.

No functional change has been made to the three (3) Engineer minimum staff ERO positions for the Engineering function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one Nuclear Engineer, one Electrical/I&C Engineer, and one Mechanical Engineer as minimum staff ERO positions for the Engineering function.

The proposed emergency plan assigns one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, one (1) Mechanical Engineer, as minimum staff ERO positions for the Engineering function.

The proposed emergency plan minimum staff ERO positions align with the NUREG-0654 R2 guidance for the OnShift Engineering function.

#### 3.9 Key Function: Supervision of Repair Team Activities

The Supervision of Repair Team Activities function includes the following task:

• Direct in-plant event response and repair activities.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

# 3.9.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	Not applicable

# 1. Emergency Plan Change Assessment

The current emergency plan does not provide for the Supervision of Repair Team Activities function.

The proposed emergency plan does not assign the Supervision of Repair Team Activities function to an on-shift position.

No functional changes have been made to the on-shift staff ERO positions for the Supervision of Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 does not assign an on-shift position to the Supervision of Repair Team Activities function.

The proposed emergency plan does not assign an on-shift position to the Supervision of Repair Team Activities function.

The proposed emergency plan is consistent with NUREG-0654 R2 guidance regarding the Supervision of Repair Team Activities function for the on-shift ERO.

#### 3.9.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Lead OSC Supervisor	(1) Lead OSC Supervisor	(1) OSC Supervisor
<ul><li>(1) Operations OSC     Supervisor</li><li>(1) Mechanical OSC     Supervisor</li><li>(1) Electrical / I&amp;C OSC     Supervisor</li></ul>	(1) FIN Supervisor	<ul><li>(1) Electrical Supervisor</li><li>(1) Mechanical Supervisor</li><li>(1) I&amp;C Supervisor</li></ul>
(1) Radiation Protection OSC Supervisor	None	(1) RP Supervisor

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns one Lead OSC Supervisor, one Electrical / I&C OSC Supervisor, one Mechanical OSC Supervisor, one Operations OSC Supervisor, and one RP OSC Supervisor as minimum staff ERO members for the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one Lead OSC Supervisor and one Fix-It-Now (FIN) Supervisor as minimum staff ERO members for the Supervision of Repair Team Activities function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) OSC Supervisor, one (1) Electrical Supervisor, one (1) Mechanical Supervisor, one (1) I&C Supervisor, and one (1) RP Supervisor as minimum staff ERO members to the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) FIN Supervisor as minimum staff ERO members to the Supervision of Repair Team Activities function.

**[Potential RIE 1-7]** The proposed emergency plan does not assign an OSC RP Supervisor minimum staff ERO position to the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO guidance.

[Potential RIE 1-8] The proposed emergency plan does not assign OSC maintenance supervisors for each craft. Specifically, this change reduces the number of OSC craft supervisor minimum staff ERO positions used for the Supervision of Repair Team Activities function from three (3) to one (1).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO guidance.

#### 3.10 Key Function: Repair Team Activities

The Repair Team Activities function does not specify a major task in NUREG-0654 R2 Table B-1.

## 3.10.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	Not applicable

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that no maintenance personnel were called upon to perform an activity from the emergency procedures or assigned an activity from non-emergency procedures that impacted the ability of another on-shift ERO member to perform their function.

#### 1. Emergency Plan Change Assessment

The current emergency plan does not require shift staffing for the Repair Team Activities function.

The proposed emergency plan does not require shift staffing for the Repair Team Activities function.

The NUREG-0654 R2 technical basis for the ERO guidance states that:

Revision 1 of NUREG-0654/FEMA-REP-1 did not describe why maintenance personnel were expected to be on-shift. This has led to issues related to consistency in interpretation and the expected qualification of these personnel, primarily on-shift. The NRC has determined that, from an EP perspective, the ability to get emergency core cooling system (ECCS) equipment operational was the primary basis for necessitating maintenance expertise while on-shift. Maintenance staff expertise may be advantageous for licensees to consider for other reasons, and at their discretion; however, for the purposes of NUREG-0654/FEMA-REP-1, the only area where maintenance availability should typically be necessary on-shift is for ECCS issues. However, a licensee's ECCS is designed to be redundant and diverse such that common mode failures are very unlikely. As a result, the need to accommodate maintenance functionality on-shift is unnecessary.

Maintenance personnel are not required for the operation of the ECCS or other safety related systems. Minor repairs (such as reset breakers, replace fuses, lubricate equipment, install spool piece, etc.) are performed by on-shift operations personnel qualified to perform the actions as part of normal, abnormal and emergency operating procedure activities. Major repair activities are not necessary to support the emergency operations procedures which ensure the plant can be placed in a safe shutdown condition.

Use of maintenance personnel for beyond design basis tasks, such as FLEX and/or SAMG activities, is documented and controlled outside the scope of the emergency preparedness program and are governed under other applicable regulations and guidance.

Use of maintenance personnel for fire brigade or rescue activities are outside the scope of the emergency preparedness program and are governed under other applicable requirements, such as the site fire protection plan and technical specifications for that function.

Maintenance personnel are not trained or used to perform EP functions (such as offsite communications). emergency plan Implementing Procedures (EPIPs) do not assign any on-shift response actions to maintenance personnel.

No functional changes have been made to the on-shift staff ERO positions for the Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 does not assign the Repair Team Activities function to an on-shift position.

The proposed emergency plan does not assign the Repair Team Activities function to an on-shift position.

The proposed emergency plan meets NUREG-0654 R2 guidance regarding the Repair Team Activities function for the on-shift ERO.

#### 3.10.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Electrician	(1) Electrician	(1) Electrician
(1) Mechanic	(1) Mechanic	(1) Mechanic
(1) I&C Technician	(1) I&C Technician	(1) I&C Technician
None	None	Additional Electrician as needed
		Additional Mechanic as needed
		Additional I&C staff if needed

# 1. Emergency Plan Change Assessment

The current emergency plan assigns for one (1) Electrician, one (1) Mechanic and one (1) I&C Technician as minimum staff ERO positions for the Repair Team Activities function.

The proposed emergency plan assigns one Electrician, one Mechanic and one I&C Technician as minimum staff ERO positions for the Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician minimum staff ERO positions to the Repair Team Activities function.

Facility managers and group supervisors all are assigned to evaluate staffing and call for additional personnel as needed based on the event.

The proposed emergency plan minimum staff ERO maintenance positions meet NUREG-0654 R2 guidance for the Repair Team Activities function.

# 3.11 Key Function: Security

The Security function includes the following task:

 Coordinate security related activities and information with the Emergency Coordinator.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

# 3.11.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Security Supervisor	(1) Security Shift Supervisor	Security staffing per the site-
- Security staff(b)	- Security staff(b)	specific security plan.

<sup>(</sup>b) Per the site Security Plan.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan specifies a Security Supervisor and on-shift security staffing per site Security Plan for the Security function.

The proposed emergency plan assigns one Security Shift Supervisor ERO position for the Security function. With the remainder of Security Force staff per the Site Security Plan.

The on-shift security position is listed in the proposed emergency plan is in conformance with 10 CFR 50 Appendix E, in which the on-shift staffing analysis documented the Security Shift Supervisor performing ERO related tasks (such as notifications, assembly, accountability, evacuation).

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 specifies on-shift security staffing is per the site-specific security plan for the Security function.

The proposed emergency plan assigns one (1) on-shift Security Shift Supervisor ERO position to the Security function.

The NUREG-0654 R2 technical basis for the ERO guidance states that:

viii This note emphasizes that on-shift operations staff, security staff, and fire brigade staff (as applicable) are controlled by other non-EP processes. It is only when EP functions are assigned to on-shift staff that the requirements of 10 CFR Part 50, Appendix E, Section IV.A.9 apply, thus requiring an on-shift staffing analysis be performed.

The proposed emergency plan assigns the on-shift Security Shift Supervisor to the Security function, which meets the NUREG-0654 R2 guidance for on-shift operations staff, security staff, and fire brigade staff who are assigned ERO tasks.

#### 3.11.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
Security Liaison	(1) Security Liaison (TSC)	(1) Security Liaison (TSC)

#### 1. Emergency Plan Change Assessment

The current and proposed emergency plan provides for one (1) Security Liaison minimum staff ERO position for the Security function.

No functional changes have been made to the minimum staff ERO positions for the Security function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Security Liaison minimum staff ERO position for the Security function.

The proposed emergency plan assigns one (1) Security Liaison minimum staff ERO position to the Security function.

The proposed emergency plan Security Liaison minimum staff ERO position meets the NUREG-0654 R2 guidance for the Security function.

# 3.12 Key Function: Media Information

The Media Information function includes the following NUREG-0654 R2 Table B-1 task:

Manage and coordinate media information related to the event

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

#### 3.12.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2			
None	None	Not applicable			

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign an on-shift position to the Media Information function.

The proposed emergency plan does not assign an on-shift position to the Media Information function.

No functional changes have been made to the on-shift staff ERO positions for the Media Information function.

# 2. NUREG-0654 R2 Alignment Assessment

The current emergency plan does not assign an on-shift position to the Media Information function.

The proposed emergency plan does not assign an on-shift position to the Media Information function.

The proposed emergency plan meets NUREG-0654 R2 guidance regarding the Media Information function for the on-shift ERO.

# 3.12.2 Minimum staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) JIC Manager	(1) Site JIS Manager	JIC/JIS staff to address media
(1) JIC Coordinator	(1) Site JIS Coordinator	inquiries at the Alert ECL**
(1) JIC Technical Briefer	(1) Remote JIS Manager	Staff to perform JIC/JIS related
Corporate Communications*	JIS Staff (d)*	tasks at SAE ECL or greater

- (c) JIS per NextEra Communications Emergency Response Plan. Does not need to be performed in the JIC, but the JIS function needs to be established at this point. (point is 60 min from declaration of an Alert)
- \* The staff of the NextEra Company Communications Department will be assigned as needed to support JIS response.
- \*\* Does not need to be performed in the TSC/OSC but needs to be established at this point.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns the minimum JIS/JIC staff ERO positions required for the Media Information function.

NextEra has implemented a Joint Information System (JIS). JIS is a system that integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, timely information during crisis or incident operations. The proposed emergency plan assigns the minimum staff ERO JIC/JIS staff positions specified by the NextEra program that controls media and public information.

The proposed plan continues to align with the current plan for this concept.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 calls for the minimum staff ERO JIC/JIS staff positions needed to address media inquiries at the Alert emergency classification level and to perform JIC/JIS related tasks at Site Area Emergency classification level.

The proposed emergency plan assigns one (1) Site JIS Manager, one (1) Site JIS Coordinator, and one (1) Remote JIS Manager as minimum staff ERO positions to the Media Information function. Non-ERO JIS personnel staffed from Nuclear Marketing/ Communications group with support from corporate group.

The NUREG-0654 R2 technical basis for the ERO guidance states that:

While the exact staffing composition is left to the licensee to determine, with input from applicable OROs, and from the Federal Emergency Management Agency, media relations is an important part of effective emergency response and is consistent with the Joint Information System and Joint Information Center portion of NIMS. As such, the need for media support should be part of the licensee's ERO. The augmentation (support) of this function should, at a minimum, be whatever is absolutely needed to support this function, i.e., without those positions this function could not occur. This should be staffed within 60-min of an Alert ECL, or greater, to address media inquiries; and within 60-minutes of an SAE ECL, or greater, to support media related tasks.

The proposed emergency plan provides a minimum staff complement of three (3) dedicated ERO positions to coordinate with non-ERO corporate communications personnel and perform activities related to the Media Information function.

The NextEra Communications Department operates a Joint Information System (JIS) for day-to-day operations and at all emergency classification levels. The Communications Department responds to media and public inquiries for abnormal conditions and events at any declared emergency classification level. The Communications Department coordinates with site management and ERO personnel, when staffed, to respond to media inquiries. Press releases are issued as appropriate from the Communications Department.

The proposed emergency plan minimum staff ERO positions meet the NUREG-0654 R2 guidance for the Media Information function. The major task is aligned with that stated in NUREG-0654 R2 guidance.

#### 3.13 Key Function: Information Technology

The Information Technology function includes the following NUREG-0654 R2 Table B-1 task:

Ensure IT equipment is operable.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

#### 3.13.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2			
None	None	Not Applicable			

# 1. Emergency Plan Change Assessment

The current emergency plan does not include an on-shift ERO position or collateral duty for the Information Technology function.

The proposed emergency plan does not include an on-shift ERO position or collateral duty for the Information Technology function.

NextEra shift personnel call the IT department hotline for issues with Critical Digital Assets and other IT issues to ensure IT equipment is operable.

No functional changes have been made to on-shift ERO positions for the Information Technology function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 guidance does not assign an on-shift position to the Information Technology function.

The proposed emergency plan does not assign an on-shift position to the Information Technology function.

The proposed emergency plan meets NUREG-0654 R2 guidance regarding the Information Technology function for the on-shift ERO.

#### 3.13.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	(1) TSC IT Lead* (at Alert or higher)
None	None	(1) EOF/JIC/JIS IT Lead* (at SAE or higher)

Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time

#### 1. Emergency Plan Change Assessment

The current emergency plan assigned for IT Support for the TSC/EOF is supported by normal IT on call processes and remote Corporate IT support.

The proposed emergency plan aligns with the current plan for minimum staff ERO position for the Information Technology function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) TSC IT Technician and one (1) EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

The proposed emergency plan does not assign TSC or EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

[Potential RIE 1-9] The proposed emergency plan does not assign IT Technicians to the TSC and EOF/JIC. Specifically, this change reduces the number of IT Technicians minimum staff ERO positions used for the Information Technology function from two (2) to zero (0).

This change deviates from the NUREG-0654 R2 minimum staff ERO guidance.

#### 4.0 ERO AUGMENTATION ANALYSIS

Each sub-section below provides an augmentation analysis of the impact to the on-shift ERO, regarding relief of key functions, by providing an emergency plan Change Assessment section and NUREG-0654 R2 Alignment Assessment section for the minimum staff ERO positions.

- The Emergency Plan Change Assessment section evaluates any difference in ERO augmentation times between the current emergency plan and the proposed emergency plan for the key function. It includes the basis for the original and proposed augmentation and justification for the change as applicable.
- The NUREG-0654 R2 Alignment Assessment section evaluates any difference in ERO augmentation times between NUREG-0654 R2 and the proposed emergency plan for the particular key function to determine conformance.

#### 4.1 Key Function: Command and Control

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Emergency Coordinator 60-minute ERO position and one (1) Emergency Director 90-minute ERO position for the Command and Control function. Both are called out at the Alert classification level.

The proposed emergency plan assigns one (1) Site Emergency Director 90-minute minimum staff ERO position at the Alert emergency classification level to the Command and Control function.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC Emergency Coordinator 90-minute minimum staff ERO position at the Alert emergency classification level and one (1) EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level to the Command and Control function.

The proposed emergency plan assigns one (1) Site Emergency Director 90-minute minimum staff ERO position at the Alert emergency classification level to the Command and Control function.

Removal of the EOF Emergency Director minimum staff ERO position is a deviation documented in Section 3 as [Potential RIE 1-1].

[Potential RIE 2-1] The proposed emergency plan adds 30 minutes to the augmentation response time for the Site Emergency Director minimum staff ERO position that performs the Command and Control function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

#### 4.2 Key Function: Emergency Classifications

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns an TSC Emergency Classification Advisor as a 60 minute minimum staff ERO position for the Emergency Classifications function.

The current emergency plan assigns an TSC Emergency Classification Advisor as a 90 minute minimum staff ERO position for the Emergency Classifications function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one TSC Emergency Classification Advisor 60-minute ERO position at the Alert emergency classification level for the Emergency Classifications function.

The proposed plan assigns one TSC Emergency Classification Advisor 90-minute ERO position at the Alert emergency classification level

[Potential RIE 2-2] The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC Classification Advisor minimum staff ERO position that performs the Emergency Classifications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

#### 4.3 Key Function: Communications

# 1. Emergency Plan Change Assessment

# A. ORO Notifications (State/County)

The current emergency plan assigns one TSC Offsite Response Organization (ORO) Communicator 60-minute position for the Communications function.

The proposed emergency plan assigns one TSC ORO Communicator 90-minute ERO position for the Communications function.

#### B. NRC Notifications

The current emergency plan calls for one TSC NRC Communicator 60 minute and one EOF NRC Communicator 90-minute minimum staff ERO positions at the Alert emergency classification level for the Communications function.

The proposed emergency plan calls for the TSC ENS Communicator to be 90-minute minimum staff ERO positions at the Alert emergency classification level for the Communications function.

#### 2. NUREG-0654 R2 Alignment Assessment

# A. ORO Notifications (State/County)

NUREG-0654 R2 assigns one (1) TSC Offsite Communicator 60-minute ERO position at the Alert emergency classification level and one (1) EOF Offsite Communicator 60-minute ERO position at the Site Area Emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator 90-minute minimum staff ERO position to the Communications function.

#### B. NRC Notifications

NUREG-0654 R2 assigns one (1) TSC NRC Communicator 60-minute ERO position at the Alert emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ENS Communicator 90-minute minimum staff ERO position at the Alert emergency classification level to the Communications function.

Removal of the EOF State/County Communicator minimum staff ERO position is a deviation documented in Section 3 as [Potential RIE 1-2].

[Potential RIE 2-3] The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC ORO Communicator minimum staff ERO position that performs the State/County notifications aspect of the Communications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

[Potential RIE 2-4] The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC ENS Communicator minimum staff ERO position that performs the NRC notifications aspect of the Communications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.4 Key Function: Supervision of RP Staff and Site Radiation Protection

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns one TSC Radiation Protection (RP) Coordinator 60-minute ERO position and one EOF RP Manager 90-minute ERO position for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one TSC RP Coordinator 90-minute ERO position and one (1) EOF RP Coordinator 90-minute ERO position for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan changes the response time for the TSC RP Coordinator from 60 to 90 minutes for the Supervision of Radiation Protection Staff.

The NEI 10-05 based On-shift Staffing Analysis performed for the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Supervision of RP Staff function out to 120 minutes.

#### NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC RP Coordinator 60-minute ERO position at the Alert emergency classification level and one (1) EOF RP Coordinator 60-minute ERO position at the Site Area Emergency classification level to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one (1) TSC RP Coordinator and one (1) EOF RP Coordinator 90-minute minimum staff ERO positions at the Alert emergency classification level to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

**[Potential RIE 2-5]** The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC RP Coordinator minimum staff ERO position that performs the Supervision of Radiation Protection Staff and Site Radiation Protection function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

#### 4.5 Key Function: Dose Assessments / Projections

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC Dose Assessment Technician 60-minute minimum staff ERO position and one (1) EOF Dose Assessment Coordinator 90-minute minimum staff ERO position to the Dose Assessments / Projections function.

The proposed emergency plan assigns one (1) Remote Dose Assessor 60-minute minimum staff ERO position and one (1) EOF Dose Assessor 90-minute minimum staff ERO positions to the Dose Assessments / Projections function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC Dose Assessor 60-minute ERO position at the Alert emergency classification level and one (1) EOF Dose Assessor 60-minute ERO position at the Site Area Emergency classification level to the Dose Assessments / Projections function.

The proposed emergency plan assigns one (1) Remote Dose Assessor 60-minute minimum staff ERO position and one (1) EOF Dose Assessor 90-minute minimum staff ERO positions to the Dose Assessments / Projections function.

Response for the EOF Dose Assessor at 90 minutes from the Alert emergency classification level is comparable to a 60 minute response from a Site Area Emergency classification level, if not sooner for all realistic events.

The proposed emergency plan meets the NUREG-0654 R2 60 and 90-minute augmentation guidance for the Dose Assessments / Projections function.

#### 4.6 Key Function: Radiation Protection

#### 1. Emergency Plan Change Assessment

The current emergency plan provides three (3) RP Technician 60-minute ERO positions and three (3) RP Technician 90-minute ERO positions for the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals to a 90 minute minimum staff ERO position for the Radiation Protection function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides three (3) RP Technicians to a 60-minute ERO position and three (3) RP Technicians to a 90-minute ERO position for the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals to a 90 minute minimum staff ERO position for the Radiation Protection function.

Removal of one (1) minimum staff radiation protection personnel is a deviation documented in Section 3 as [Potential RIE 1-5].

[Potential RIE 2-6] The proposed emergency plan adds 30 minutes to the augmentation response time to the radiation protection personnel minimum staff ERO positions that perform the Radiation Protection function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

#### 4.7 Key Function: Field Monitoring Teams (FMTs)

# 1. Emergency Plan Change Assessment

#### A. Onsite Field Monitoring

The current emergency plan assigns one Onsite FMT (technician and driver) 60-minute ERO positions for the Field Monitoring Teams function.

The proposed emergency plan does not provide for an onsite FMT ERO position for the Radiation Protection function.

# B. Offsite Field Monitoring

The current emergency plan assigns one FMT Technician and one FMT Driver as 60-minute ERO positions and one FMT Technician and one FMT Driver as 90-minute ERO positions for the Field Monitoring Teams function.

The proposed emergency plan assigns two FMT Technicians and two FMT Drivers as 90-minute ERO positions for the Field Monitoring Teams function.

#### 2. NUREG-0654 R2 Alignment Assessment

#### A. Onsite Field Monitoring

NUREG-0654 R2 assigns one (1) onsite Field Monitoring Technician and one (1) onsite Field Monitoring Driver to a 60-minute minimum staff ERO position the onsite Field Monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

#### B. Offsite Field Monitoring

NUREG-0654 R2 assigns one (1) offsite Field Monitoring Technician 60-minute ERO position and one (1) Field Monitoring Driver 60-minute ERO position for the Field Monitoring Teams function.

NUREG-0654 R2 assigns one (1) offsite Field Monitoring Technician 90-minute ERO position and one (1) Field Monitoring Driver 90-minute ERO position for the Field Monitoring Teams function.

The proposed emergency plan assigns two (2) FMT Technicians and two (2) FMT Drivers as 90-minute minimum staff ERO to the offsite field monitoring aspect of the Field Monitoring Teams function.

Removal of one minimum staff FMT Technician and one Driver from the onsite field monitoring aspect of the Field Monitoring Teams function is a deviation documented in Section 3 as [Potential RIE 1-6].

[Potential RIE 2-7] The proposed emergency plan adds 30 minutes to the augmentation response time to the FMT Technician/FMT Driver minimum staff ERO positions that perform the offsite field monitoring aspect of the Field Monitoring Teams function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

#### 4.8 Key Function: Engineering

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns one Core/Thermal Engineer, one Electrical/I&C Engineer, and one Mechanical Engineer as 60-minute ERO positions for the Engineering function.

The proposed emergency plan assigns one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as 60-minute ERO positions for the Engineering function. This aligns with the current emergency plan 60-minute minimum staff ERO requirements.

The proposed emergency plan is consistent with the current emergency plan regarding the Engineering function.

The NEI 10-05 based On-shift Staffing Analysis performed for the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Engineering function out to 120 minutes.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Nuclear Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer 60-minute ERO positions to the Engineering function.

The proposed emergency plan assigns one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as 60-minute minimum staff ERO positions to the Engineering function. This change aligns with NUREG-0654 R2 60-minute minimum staff ERO guidance.

The proposed emergency plan is consistent with the NUREG-0654 R2 guidance regarding the Engineering function.

The NEI 10-05 based On-shift Staffing Analysis performed for the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Engineering function out to 120 minutes.

# 4.9 Key Function: Supervision of Repair Team Activities

### 1. Emergency Plan Change Assessment

The current emergency plan assigns the following positions for the Supervision of Repair Team Activities function.

- One Lead OSC Supervisor 60-minute ERO position
- One Operations Supervisor 60-minute ERO position
- One Electrical/I&C OSC Supervisor 60-minute ERO position
- One Mechanical OSC Supervisor 90-minute ERO position
- One RP Supervisor 90-minute ERO position

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) FIN Supervisor as 90-minute minimum staff ERO positions to the Supervision of Repair Team Activities function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) 60-minute OSC Supervisor, one (1) 90-minute Electrical Supervisor, one (1) 90-minute Mechanical Supervisor, one (1) 90-minute I&C Supervisor, and one (1) 90-minute RP Supervisor ERO positions for the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) FIN Supervisor as 90-minute minimum staff ERO positions to the Supervision of Repair Team Activities function.

Removal of OSC RP Supervisor from the Supervision of Repair Team Activities function is a deviation documented in Section 3.9 as [Potential RIE 1-7].

Use of the FIN Supervisor for supervision of all craft is a deviation documented in Section 3.9 as [Potential RIE 1-8].

[Potential RIE 2-8] The proposed emergency plan adds 30 minutes to the augmentation response time to the Lead OSC Supervisor and FIN Supervisor minimum staff ERO position that performs the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan 60-minute ERO response time requirement for the Lead OSC Supervisor, Operations Supervisor and Electrical/I&C OSC Supervisor, and the NUREG-0654 R2 60-minute ERO response time guidance for the Lead OSC Supervisor.

#### 4.10 Key Function: Repair Team Activities

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Electrical Technician and one (2) Electrical Technician 60 minute minimum staff ERO positions, and one (1) I&C Technician 90 minute minimum staff ERO position for the Repair Team Activities function.

The proposed emergency plan assigns one Mechanic and one Electrician as 90-minute minimum staff ERO positions to the Repair Team Activities function. The proposed plan aligns with the current plan timing for the staffing of the I&C Technician.

The current emergency plan assigns for one Mechanic and one Electrician as 60 minute minimum staff ERO positions for the Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) 60-minute Electrician, one (1) 60-minute Mechanic, and one (1) 90-minute I&C Technician minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician as 90-minute minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan meets the NUREG-0654 R2 90-minute augmentation guidance staffing the I&C Technician for the Repair Team Activities function.

**[Potential RIE 2-9]** The proposed emergency plan adds 30 minutes to the augmentation response time to the Mechanic and Electrician craft minimum staff ERO positions that perform the Repair Team Activities function.

This change deviates from the current emergency plan 60-minute ERO response time requirements and the NUREG-0654 R2 60-minute ERO response time guidance.

#### 4.11 Key Function: Security

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Security Liaison 60-minute ERO position for the Security function.

The proposed emergency plan provides one (1) Security Liaison 90-minute minimum staff ERO position for the Security function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Security Liaison 60-minute ERO position for the Security function.

The proposed emergency plan provides one (1) Security Liaison 90-minute minimum staff ERO position for the Security function.

**[Potential RIE 2-10]** The proposed emergency plan adds 30 minutes to the augmentation response time to the Security Liaison minimum staff ERO position that performs the Security function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.12 Key Function: Media Information

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns JIS/JIC staff ERO positions capable of responding to media and public inquiries for abnormal conditions and events at any declared emergency classification level. JIS/JIC personnel will be notified at any classification level, but have no specific response time, but will be capable of addressing media inquiries.

The proposed emergency plan assigns JIC/JIS staff ERO positions capable of responding to media and public inquiries for abnormal conditions and events at any declared emergency classification level within 60 minutes.

The proposed emergency plan assigns one (1) Site JIS Manager, one (1) Site JIS Coordinator, and one (1) Remote JIS Manager as 90-minute minimum staff ERO positions to the Media Information function. Non-ERO JIS personnel staffed from Nuclear Marketing/Communications group.

No augmentation change has been made to the ERO positions for the Media Information function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns 60 and 90-minute JIC/JIS staff ERO positions capable of performing the Media Information function.

The proposed emergency plan assigns 90-minute JIC/JIS staff ERO positions capable of performing the Media Information function.

The proposed emergency plan meets the NUREG-0654 R2 60 and 90-minute augmentation guidance for the Media Information function.

#### 4.13 Key Function: Information Technology

#### 1. Emergency Plan Change Assessment

The current emergency plan does not provide an TSC IT Technician or an EOF IT Technician minimum staff ERO position for the Information Technology function.

The proposed emergency plan does not provide an TSC IT Technician or an EOF IT Technician minimum staff ERO position for the Information Technology function.

No functional changes have been made to the minimum staff ERO positions for the Information Technology function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) 90 minute TSC IT Technician and one (1) 90 minute EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

The proposed emergency plan does not provide an TSC IT Technician or an EOF IT Technician minimum staff ERO position for the Information Technology function.

Use of remote IT support in the emergency response facilities for the Information Technology function is a deviation documented in Section 3 as [Potential RIE 1-9].

#### 5.0 NON-MINIMUM STAFF ERO STAFFING

The current emergency plan and implementing procedures describe the required minimum staff ERO (i.e., if any position is not staffed, then the emergency plan cannot be effectively implemented). The current implementing procedures also contains trained and qualified non-minimum staff ERO positions that are available to assist the minimum staff ERO (for tasks such as administration, communications, coordination, and logistics).

By procedure, the non-minimum staff ERO positions are called out at the same time as minimum staff ERO positions. NextEra uses an all-call notification method, where all individuals qualified to fill an ERO position are notified and expected to respond to their assigned facilities. The presence of the non-minimum staff ERO positions is not required to activate the respective ERFs.

NUREG-0654 R2 guidance does not discuss non-minimum staff ERO positions. In NUREG-0654 R2 guidance, Table B-1, Note iii addresses the required minimum staffing as compared to other staff not critical to the effective emergency plan implementation. Note iii states:

The minimum ERO staffing plan is that which is required to effectively implement the site-specific emergency plan (i.e., the emergency plan cannot be effectively implemented without this staff). The emergency plan should describe the minimum ERO staffing plan, while supporting implementing procedures can describe any other staff response desired by the licensee as long as this staff is not critical to effective emergency plan implementation. The augmentation times listed are intended to provide a model for applicants and licensees to consider in the development of their site-specific emergency plan.

The intent of this note is to emphasize the distinction between minimum staff ERO positions required to implement the emergency plan and non-minimum staff ERO positions that provide assistant but are not essential to the response activities.

The non-minimum staff ERO positions remain in the implementing procedures and will continue to be notified and respond at an Alert or higher emergency classification level, at the same time as the minimum staff ERO; however, the non-minimum staff ERO positions are not required to be present to activate the Emergency Response Facilities (ERFs) or relieve the on-shift ERO of any EP responsibilities.

The table below identifies the current minimum and non-minimum staff ERO positions, by facility, in comparison to the proposed minimum and non-minimum staff ERO positions. The positions have been dispositioned as follows:

<b>Current E-Plan / Procedures</b>	Proposed E-Plan	Disposition		
TSC				
Emergency Coordinator	Site Emergency Director	Title Change		
TSC Coordinator	TSC Coordinator	No Change		
Site RP Coordinator	TSC RP Coordinator	Title Change		
TSC Dose Assessor		Now operates remotely		
FMT Technician	FMT Technician	Moved to EOF		
FMT Driver	FMT Driver	Moved to EOF		
ORO Communicator	ORO Communicator	No Change		
NRC Communicator	ENS Communicator	Title Change		
Core/Thermal Engineer	Reactor Engineer	Now operates remotely		
	Mechanical Engineer	Remote position (moved from OSC)		
	Electrical / I&C Engineer	Remote position (moved from OSC)		

Current E-Plan / Procedures	Proposed E-Plan	Disposition			
Security Liaison	Security Liaison	Title Change			
Emergency Classification Advisor	Classification Advisor	No Change			
TSC ERF Communicator	TSC ERF Communicator	Change from Min to Non-Min			
Administrative Support		Non-Minimum Position Eliminated			
OSC					
Lead OSC Supervisor	Lead OSC Supervisor	No Change			
	FIN Supervisor	Position replaces other supervisors			
Operations OSC Supervisor	'	Minimum Staff Position Eliminated			
RP OSC Supervisor	1	Minimum Staff Position Eliminated			
Elec/I&C OSC Supervisor	1	Minimum Staff Position Eliminated			
Mechanical OSC Supervisor		Minimum Staff Position Eliminated			
RP Technician	RP Technician	+			
RP rechnician	RP Qualified Individual	No Change Title Change (training changed)			
Mechanical Technician	Mechanic	Title Change			
Electrical Technician	Electrician	Title Change			
I&C Technician	I&C Technician	No Change			
Chemistry Technician		Not included in NUREG-0654 E-Plan unless assigned EP tasks			
Mechanical Engineer		Now operates remotely reporting to TSC			
Electrical / I&C Engineer		Now operates remotely reporting to TSC			
ICP - Operations	ICP - Operations	Non-Minimum Position			
ICP - Radiation Protection	ICP - Radiation Protection	Non-Minimum Position			
ICP - Security	ICP - Security	Non-Minimum Position			
io. Codanty	OSC ERF Communicator	Added Non-Minimum Position			
EOF	CCC ETT Communicator	/ daed Holl Willimidit F Osition			
Emergency Director	EOF Manager	Title Change			
EOF RP Manager	EOF RP Coordinator	Title Change			
EOF Dose Assessor	EOF Dose Assessor	Title Change			
	Remote Dose Assessor	Previously TSC Dose Assessor			
EOF NRC Communicator		Minimum Staff Position Eliminated			
FMT Technician	FMT Technician	Moved from TSC			
FMT Driver	FMT Driver	Moved from TSC			
EOF Coordinator		Minimum Staff Position Eliminated			
Resource Coordinator	Resource Coordinator	Now operates remotely			
EOF ERF Communicator		Minimum Staff Position Eliminated			
Administrative Support	Admin Coordinator	Now operates remotely			
IT Lead (EOF)	IT Support	Non-Minimum Position provided by IT Help desk			
County Liaison	County Liaison	No Change			
State Liaison	State Liaison	No Change			
Site JIS/JIC	Cita IIC Manager	Title Ober 11			
Point Beach JIC Manager	Site JIS Manager	Title Change			
Corporate JIC Manager	Remote JIS Manager	Now operates remotely			
JIC Coordinator  JIC Technical Briefer	Site JIS Coordinator JIS Technical Liaison	Title Change			
Media Center Coordinator	Media Coordinator	Title Change Title Change			
Modia Octilei Oddiulialdi	IMOGIA COOIGIIIAIOI	The Orlange			

Current E-Plan / Procedures	Proposed E-Plan	Disposition
Emergency Communication	Emergency Communication	Non-ERO Positions/Support provided
Team		by Corporate Communications
		personnel who perform JIS functions
		as part of normal duties

Note: Shaded boxes are non-minimum staff ERO positions

Each EP task assigned to the minimum and non-minimum staff ERO positions in the current emergency plan is evaluated and dispositioned in the ERO Task Analysis.

		NUREG-0654 R2 Current E-Plan			lan	Proposed E-Plan					
			Alert	Alert	SAE		Alert	Alert		Alert	Alert
Function	Position Title	Shift	60 Min	90 Min	60 Min	Shift <sup>(e)</sup>	60 Min	90 Min	Shift	60 Min	90 Min
DI 10 1	Operating Supervisor					2					
Plant Systems	Control Operators					4					
Operations	Auxiliary Operators					5					
	Shift Manager	1				1			1		
Command and Control	Site Emergency Director (TSC)		1				1				1
Facility Control	EOF Manager (EOF)				1			1			1
Emergency Classifications	Classification Advisor (CR/TSC)	1(a)	1			1(a)	1		1(a)		1
	Shift Communicator	1(a)				1			1(a)		
	ORO Communicator (TSC)		1				1				1
Communications	ENS Communicator (TSC)		1				1				1
	HPN Communicator(I)				1			1			
	ERF Communicator(g)						1	1			
A 20 140	Shift Manager	1(a)				1(a)	1		1(a)		
	TSC RP Coordinator (TSC)		1								1
	EOF RP Coordinator (EOF)				1			1			1
Radiation Protection	RP Technician	2	3	3		2	3	3	1		3
	RP Qualified Individual								1		2
	Shift Dose Assessor	1(a)				1(a)			1(a)		
Dose Assessments / Projections	EOF Dose Assessor (EOF)		1				1 (TSC)	1			1
i rojections	Remote Dose Assessor (TSC/OSC)									1	
	Onsite FM Technician		1				1				
Field Menitoring Teams	Onsite FM Driver		1				1				
Field Monitoring Teams	Offsite FM Technician (EOF)		1	1			1	1			2
	Offsite FM Driver (EOF)		1	1			1	1			2

			NUREG-	-0654 R2	2	Cu	rrent E-P	lan	Pro	posed E-F	Plan
			Alert	Alert	SAE		Alert	Alert		Alert	Alert
Function	Position Title	Shift	60 Min	90 Min	60 Min	Shift <sup>(e)</sup>	60 Min	90 Min	Shift	60 Min	90 Min
	Lead OSC Supervisor (OSC)		1				1				1
	FIN Supervisor (OSC)										1
Supervision of Repair	Elect/I&C Supervisor (OSC)(h, f)			1				1			
Team Activities	Mechanical Supervisor (OSC)(h)			1				1			
	Ops Supervisor (OSC)(h)			1			1				
	RP Supervisor (OSC)(h)			1				1			
	Electrical Technician (OSC)		1				1				1
Repair Team Activities	Mechanical Technician (OSC)		1				1				1
Repair Team Activities	I&C Technician (OSC)			1				1			1
	Chemistry Technician (OSC)						1				N/A
	STA	1(a)							1(a)		
Engineering and Plant	Electrical/I&C Engineer (Remote)		1				1			1	
Monitoring	Mechanical Engineer (Remote)		1				1			1	
	Nuclear Engineer (Remote)		1				1			1	
	Security Shift Supervisor					1			1		
Security	Security Force	(b)							(b)		
	Security Liaison (TSC)		1				1				1
	JIS / JIC Staff		(c)		(c)						
Media Information	JIS / JIC Manager (Site)							1	(c)		1
wiedia illiorillation	JIS / JIC Coordinator (Site)							1	(c)		1
	Remote JIS Manager (Remote)							1	(c)		1
Information	IT Coordinator (Site)			1							(d)
Technology (IT)	IT Coordinator (EOF)				1						(d)
	ERO Totals – Full Breakdown	3	20	11	5	5 <sup>(e)</sup>	23	17	4	4	26
ERO Totals – On	-shift and Minimum Staffing	3		36		5	4	0	4	3	0
ERO To	tals – All Required Positions Filled		3	9			45			34	

<sup>(</sup>a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.

- (b) Per the site Security Plan.
- (c) Does not need to be performed in the JIC, but function needs to be established at this point. ERO response to and activation of the JIC is coordinated with the offsite agencies and carries no time requirement.

- (d) IT personnel monitor Critical Digital Assets remotely and respond any time an issue is identified.
- (e) Current emergency plan identifies shift staffing as required by the Technical Specifications plus RPTs, Security Supervisor and a Chemistry Technician. Positions not counted in this table as ERO positions.
- (f) Electrical and I&C Supervisors combined.
- (g) Emergency Response Facility Communicators will continue to be staff as non-minimum staff positions by procedure.
- (h) Positions in current plan, duties now performed by FIN Supervisor ana OSC Lead Supervisor.

# **ENCLOSURE 7**

# St. Lucie Nuclear Plant

# **Analysis Report #2**

# **ERO** Key Function and Augmentation Analysis

(72 pages follow)





St. Lucie Nuclear Plant (PSL)

# Analysis Report #2 ERO Key Function and Augmentation Analysis

12/09/22

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#### 1.0 INTRODUCTION

NextEra has developed the proposed emergency plan using the NUREG 0654/FEMA-REP-1, Revision 2 (NUREG-0654 R2). This analysis was conducted to identify and justify deviations to the proposed Emergency Response Organization (ERO) from the current emergency plan and alternative approach to the NUREG-0654 R2 guidance.

The NRC has provided Technical Basis for The Proposed Guidance in NUREG-0654/FEMA-REP-1, Section II.B, "Emergency Response Organization" to assist licensees in their development of site-specific staffing plans, particularly when the licensee may want to develop an alternative approach. The technical basis document contains information regarding;

- the importance of each key function for effective emergency response.
- the basis for the positions and number of responders selected to fulfill those functions.
- the basis for the augmentation times to relieve on-shift personnel of those functions.

Additionally, NRC has issued RIS 2016-10, License Amendment Requests for Changes to Emergency Response Organization Staffing and Augmentation.

The NRC 0654/FEMA-REP-1 Section II.B technical basis document and RIS 2016-10 were used in the development of the ERO key functional and augmentation analyses.

Summary of this analysis is contained in the License Amendment Request enclosures 1, 2, 3 and 4. The summary identifies the deviations and alternate approaches, reason for the changes, and the basis concluding that the proposed emergency plan continues to meet the planning standards in 10 CFR 50.47(b) and the requirements in Appendix E to 10 CFR Part 50.

# 1.1 REGULATORY REQUIREMENTS

The planning standards in 10 CFR 50.47(b) establish the requirements that the onsite and offsite emergency response plans must meet for the NRC staff to make a finding that there is reasonable assurance that the licensee can, and will, take adequate protective measures in the event of a radiological emergency. The capabilities of on-shift and augmented ERO staffing are addressed under the following regulations:

- 10 CFR 50.47(b)(2) states, "On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified."
- 10 CFR 50.conditions states, "Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use."
- 10 CFR 50.47(b)(11), states, in part, "Means for controlling radiological exposures, in an emergency, are established for emergency workers...."
- Appendix E to 10 CFR Part 50, "Emergency Planning and Preparedness Production and Utilization Facilities," Section IV, Part A, "Organization," states, in part, "The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization...."

#### 1.2 Guidance

NUREG-0654 R2, Section II, "Planning Standards and Evaluation Criteria," Evaluation Criteria II.B. addresses the Emergency Response Organization planning standard 10 CFR 50.47(b)(2) and the applicable sections of Appendix E to CFR Part 50. Evaluation Criterion II.B.3 specifies:

A table is developed depicting the site-specific on-shift staffing plan, as well as the ERO staffing augmentation plan. Table B-1, "Emergency Response Organization (ERO) Staffing and Augmentation Plan," provides a model for licensees to consider.

The NUREG-0654 R2 Table B-1 lists the Emergency Preparedness functions and augmentation times needed to Implement the typical emergency plan. The table is a model to be considered in the development of a site-specific emergency plan.

NextEra has developed the proposed emergency plan based upon based upon NUREG-0654 R2, Evaluation Criteria II.B.5 for minimum ERO on-shift and augmentation staff. The proposed ERO staffing plan contains an alternate approach which was evaluated using the functional area analysis of NUREG-0654 R2 and as much as possible a performance-based approach.

Along with evaluating the proposed ERO plan, this analysis report makes available sufficient bases and information for the NRC staff to evaluate whether the proposed alternative methods meet the intent of the regulatory planning standards and does not relax the regulatory planning standards.

The alternative methods are based upon the precedence of previously approved license amendment requests referenced in the document and others are considered first-of-a-kind (FOAK) methods.

#### 2.0 DEVIATION SUMMARY

# 2.1 <u>ERO Key Function Analysis</u>

The ERO Key Function Analysis compares and evaluates the current emergency plan on-shift and minimum staff ERO positions against those in the proposed emergency plan and in NUREG-0654 R2 guidance. Staffing deviations in the proposed emergency plan from the current emergency plan and NUREG-0654 R2 are categorized as potential RIEs and evaluated to determine whether the capability to perform the function is sustained (no degradation or loss of function).

Refer to Attachment 1, ERO Staffing Plan Comparison Table, for a side-by-side summary of staffing and augmentation comparison between NUREG-0654 R2 Table B-1, the current emergency plan, and the proposed emergency plan.

The Key Function Analysis establishes that no degradation or loss of function, or misalignment or loss of task assignment would occur as a result of any change made to the on-shift and minimum augmenting ERO positions. This alternate staffing approach continues to support timely and effective performance of the Major Functional Areas and Major Tasks listed in NUREG-0654 R2 Table B-1.

# 2.1.1 [Potential RIE 1-1] No EOF Director/ED Position

The proposed emergency plan does not assign an EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level for the Command and Control function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Command and Control function from two (2) to one (1).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

For a SAE ECL, or greater, these functions (or a subset of them), typically those associated with protective action recommendations (PARs), should be assigned to an Emergency Director located in the EOF....

The NextEra TSCs and EOFs are activated at an Alert emergency classification level. By activating both the TSC and EOF at an Alert emergency classification level and maintaining the non-delegable tasks of classification, notification, and PARs in the TSC, the proposed emergency plan does not need to provide additional augmenting ERO positions to move those tasks between emergency response facilities.

An EOF Emergency Director minimum staff ERO position is not needed at the Site Area Emergency classification level as the Command and Control function, along with all non-delegable responsibilities, are transferred from the Shift Manager to the Site Emergency Director at the Alert emergency classification level and remain in the TSC throughout a declared emergency. This change in the proposed emergency plan simply retains the Command and Control function in the TSC with the Site Emergency Director.

#### 2.1.2 [Potential RIE 1-2] No EOF ORO Communicator Position

The proposed emergency plan does not provide an EOF ORO Communicator minimum staff ERO position at the Site Area Emergency classification level for the Communications function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the ORO aspect of the Communications function from two (2) to one (1).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

This function should consist of 2 staff members to fulfill the communication needs, at a minimum: 1 for the NRC and 1 for ORO notification and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee. These are typically located in the TSC. For an SAE ECL, or greater, at least 1 additional communicator should be staffed in the EOF.

NUREG-0654 R2 guidance designates the Offsite Response Organization (ORO) (State/County) communication location as 'typically' in the TSC based on staggered activation of the emergency response facilities.

The NextEra TSCs and EOFs are activated at an Alert emergency classification level. By activating both the TSC and EOF at an Alert emergency classification level and maintaining the non-delegable tasks of classification, notification, and PARs in the TSC, the proposed emergency plan does not need to provide additional augmenting ERO positions to move those tasks between emergency response facilities.

An EOF State/County Communicator minimum staff ERO position is not needed at the Site Area Emergency classification level as the Communications function for the ORO remains in the TSC throughout a declared emergency. This change in the proposed emergency plan simply retains the Communications function for the ORO in the TSC.

# 2.1.3 [Potential RIE 1-3] Fewer Shift RP Personnel

The proposed emergency plan reduces the number of on-shift ERO positions for the Radiation Protection function. Specifically, this change reduces the overall number of radiation protection personnel on-shift ERO positions used for the Radiation Protection function from three (3) in the current emergency plan to two (2) in the proposed emergency plan.

This change deviates from the current emergency plan on-shift staff ERO position requirements.

**Deviation Justification:** NUREG-0654 R2 Table B-1 calls for "Two qualified radiation protection personnel for a single unit site or one per unit for a multi-unit site."

The proposed emergency plan provides two qualified radiation protection personnel.

The on-shift Chemistry Technician does not have emergency plan responsibilities in the proposed emergency plan. Staffing of an on-shift Chemistry Technician may continue outside the requirements of the emergency plan.

The proposed emergency plan on-shift staffing conforms to NUREG-0654 R2.

#### 2.1.4 [Potential RIE 1-4] On-shift RP Personnel Allowed Collateral Duties

The proposed emergency plan allows collateral duty assignments to be given to radiation protection personnel when performing the Radiation Protection function. Specifically, this change allows radiation protection personnel to perform the Dose Assessment /Projections function and support other on-shift actions when not assigned a response activity.

This change deviates from the NUREG-0654 R2 on-shift staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

The ability to provide radiological expertise when the plant is experiencing an event with serious radiological consequences is crucial, due to the unknown radiological environment faced by emergency workers, particularly at the onset of the event. This function should be staffed by 2 qualified RP staff members on-shift (or 1 per unit for multi-unit sites). These staff members should not have any collateral duties during emergency response.

Consistent with NUREG-0654 R2, the proposed emergency plan assigns the Dose Assessments / Projections as a collateral duty. This emergency response collateral duty can be assigned to any on-shift individual qualified in Dose Assessment.

Personnel who are not ANSI qualified RPTs, such as an appropriately trained and qualified operator or a chemistry technician, may be assigned to the dedicated on-shift RPQI position. When the RPQI position is not filled by a qualified ANSI RPT, they cannot be given time sensitive or other tasks during emergency response that interfere with the Radiation Protection function.

#### 2.1.5 [Potential RIE 1-5] Fewer OSC RP Response Personnel

The proposed emergency plan reduces the number and qualifications of minimum staff ERO positions for the Radiation Protection function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Radiation Protection function from six (6) in the current emergency plan and in NUREG-0654, to five (5) in the proposed emergency plan, consisting of three (3) RPTs and two (2) RP Qualified individuals that are task trained but not required to be ANSI equivalent RPTs.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

While not all Alert ECLs (or lower) have radiological consequences, licensees should develop their ERO staffing plans for a worst-case scenario from a radiological risk perspective, i.e., an event which results in the immediate (within 60-minutes) loss of 2 or more fission product barriers leading to significant and unknown radiological conditions. The augmentation (support) of this position should occur in two stages: within 60 minutes of an Alert ECL or greater, 3 additional qualified RP staff should be available, and within 90 minutes of an Alert ECL, or greater, an additional 3 additional qualified RP staff should be available, and both are typically staffed in the OSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Personnel assigned to perform this function should be fully qualified HP technicians as described in ANSI/ANS-3.1-1993, "Selection, Qualification, and Training of Personnel for Nuclear Power Plants," that was approved for use by Regulatory Guide 1.8, "Qualification and Training of Personnel for Nuclear Power Plants."14 Personnel who are typically trained to a level of "meter qualified" to perform basic HP duties are not trained or do not have the necessary experience to perform complex HP duties, as discussed in HPPOS-0238, that would be necessary in a radiological emergency. For example:

- (1) Typically the training does not include providing HP coverage for other personnel.
- (2) Radiation protection is not normally incorporated into normal job duties.
- (3) Radiological conditions during an emergency may be unknown or rapidly changing.

The following Emergency Plan functions would constitute in-plant protective actions, which would require a fully qualified HP technician:

- Provide guidance for personnel protection to assist in minimizing personnel exposure.
- Provide guidance for exposure authorizations, dose guidelines, and postexposure assessments.
- Provide job coverage for in-plant repair and corrective actions, and operations support, under changing radiological conditions.
- Provide guidance for emergency decontamination of personnel, equipment, and facilities.
- Provide guidance for personnel contamination control and respiratory protection.

NUREG-0654 R1 lists the RPT functions assigned to the six augmenting OSC RPTs as:

- In-Plant Surveys
- HP coverage for repair, corrective actions, search, and rescue first aid & firefighting
- Personnel Monitoring
- Dosimetry
- Access Control

These functions have been reworded but remain similar in NUREG-0654 R2 as:

- Provide in-plant surveys
- Provide radiation protection coverage for responders accessing unknown radiological environments during emergency conditions
- Control dosimetry and control area access

The number of augmenting RPTs for the above functions in NUREG-0654 R2 Table B-1 has not changed from the number in NUREG-0654 R1 Table B-1.

The following guidance documents were considered in the staffing of augmenting ERO radiation protection personnel in the common emergency plan:

Per RIS 2016-10, the licensee could show that the basis for the justification includes
the availability of installed area, process, airborne and effluent radiation monitors,
automated systems and information technology solutions, and enhanced work
processes that would be available under accident conditions. Supporting tools and

processes that may be considered include portal monitors, self-alarming dosimeters, and automated access control system for the radiologically controlled area (RCA) that maintain active radiation work permits, which are readily available if an emergency is declared (e.g., the system verifies qualifications, dose margins, and access requirements).

 Per HPPOS-238, Health Physics Technicians (HPTs) may independently perform specific tasks or job assignments if they meet the required prerequisites and complete the required task qualifications of their plant training programs. There are certain tasks and job assignments, however, that require in-depth knowledge and can only be performed by fully qualified ANSI technicians.

NextEra controls the qualification of the ERO as outlined in 10 CFR 50.47(b)(15). To ensure that qualifications are consistent throughout the fleet, the RPQI qualification requirements are maintained in Section O of the proposed emergency plan. The RPQI ERO personnel will be task qualified to the tasks listed in NUREG-0654 Revision 2 Table B-2 (shown above)

This approach meets the intent of 50.47(b)(15) and allows the Systematic Approach to Training (SAT) process to determine and control the RPQI qualification requirements by task. The proposed emergency plan will utilize the SAT process to set the qualification requirements of the RPQI, independent of an ANSI 8.1 standard, while ensuring that all personnel are trained to be able to respond to an emergency – not to be a day-to-day RPT.

Per NUREG-0713, Occupational Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities 2004 and Draft Tables and Figures for 2020 NUREG-0713, the Average Measurable TEDE per individual has decreased from 0.31 rem (1995) to 0.09 rem (2020). Advances in technology in access control, electronic dosimetry (personnel monitoring and remote monitoring), pre-developed RWPs (for normal and for emergency conditions), and ARM/PRM plant computer information display systems reduce radiation protection personnel involvement in radiological activities and have contributed to the decrease.

- Dosimetry and access control is established using technological means to ensure that personnel wear the correct dosimetry into the radiological controlled area and are signed onto the RWP (affirming that they have read and understand the RWP). Telemetry with field communications and dosimetry can provide the RP personnel with all data that one would have previously needed equipment and multiple personnel to perform.
- On-shift and augmented ERO radiation protection coverage is monitored and provided by radiation protection personnel. The radiation protection personnel ensure that dispatched personnel are provided real time information on radiological conditions when deployed and if conditions change at the work location. In-plant radiological conditions are provided using technology available to the radiation protection personnel on the plant computer information display systems.

As this technology has become more integrated at NextEra sites and throughout the industry for normal and outage operations their use has become commonplace. As such, radiation protection personnel that are properly trained on the technology outlined here are proficient with their use in emergency response functions. These enhancements would be used during a radiological emergency.

The OSC utilizes the day-to-day "Fix-It-Now" (FIN) Team concept, which includes radiation protection support as necessary. OSC minimum staffing requires 3 craft personnel. An RPT would monitor plant conditions remotely and assist the Lead OSC Supervisor with RP oversight activities while the other RP personnel (RPTs and RPQIs)

could be tasked with providing coverage for craft personnel if a team is dispatched into a radiologically controlled area.

All NextEra sites are Pressurized Water Reactor (PWR) designs. There are fewer radiologically controlled areas at PWRs than at Boiling Water Reactor (BWR), which allows for less RP support staff during normal operations. Per Draft Tables and Figures for 2020 NUREG-0713, the Average Collective Dose per Reactor in 2020 is 31 person-rem at PWRs and 95 person-rem at BWRs. Even with a SG tube rupture using the main condenser as the cooldown medium, the turbine buildings will not be unmanageable with the responders as the major steps of each site's emergency operating procedures for a SG tube rupture will have completed their major functions of "identify – isolate – cooldown – depressurize – terminate safety injection" are expected to be complete prior to ERO arrival. All temperature control steps later in the procedures where the ERO may be present will be minimal temperature control steps which send minimal additional contaminated steam into the secondary systems. As the limiting accident that will expand radioactively controlled/ contaminated areas outside of the radiologically controlled area, there is no need to staff PWR sites at the same level outlined in the NUREG, which factored in BWR designs into their calculations for staffing levels.

The above statements support the position that Radiation Protection function can be performed by the four augmentation radiation protection personnel ERO positions.

#### 2.1.6 [Potential RIE 1-6] No On-site Field Monitoring Team

The proposed emergency plan does not staff the onsite field monitoring minimum staff ERO position for the Field Monitoring Teams function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the onsite field monitoring aspect of the Field Monitoring Teams function from two (2) to zero (0).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

The ability to locate, monitor, and track a radioactive plume is important to ensure appropriate protective measures are taken in response to a radiological event. The ability to staff these teams before they may be needed (i.e., before a radiological release) greatly enhances the ability of the licensee to provide timely and accurate PARs.

- An onsite FMT should be staffed, consisting of a monitor and a driver. This onsite FMT is responsible for radiological monitoring of the site's Protected Area. ...
  - i. The monitor should be qualified to assess radiation and contamination levels, but need not be an ANSI qualified RP Technician as long as the FMT is under the direct supervision of senior staff in the TSC or EOF.
  - iii. The driver should be knowledgeable about the vehicle and the proposed routes to be traversed.

NUREG-0654 R2 Table B-1 guidance for augmenting Field Monitoring Team staffing has not changed from NUREG-0654 R1 (six total personnel) despite the technology (equipment and communications) and process advancements in the last 40+ years.

NUREG-0654 R2 designates one on-site (including inside of the Protected Area) Field Monitoring Team and one off-site Field Monitoring Team responding in 60 minutes to be ready to respond to a radiological release or to detect the radiation in the field thus

confirming and quantifying a release. A second off-site Field Monitoring Team responding in 90 minutes is added to back up the first off-site Field Monitoring Team.

## On-site Field Monitoring Team Driver ERO Position

On-site survey and sampling activities are performed without a vehicle since the site Protected Area boundaries are relatively small and plume tracking is not applicable. The Protected Area can be easily and efficiently traversed on foot or in a utility vehicle. The survey equipment is portable and does not require two individuals for transport or operation. Thus, there is no need for an on-site Field Monitoring Team Driver.

#### On-site Field Monitoring Team Technician ERO Position

The current emergency plan utilizes two Field Monitoring Teams, primarily assigned to monitor conditions outside the Protected Area. NextEra typically uses an individual from the pool of OSC radiation protection personnel to perform on-site out-of-plant (inside the Protected Area) surveys if needed. However, one of the two Field Monitoring Teams may be called upon to enter the Protected Area to perform surveys when OSC radiation protection personnel are assigned other tasks.

For NextEra stations, two Field Monitoring Teams are sufficient to perform on-site and off-site field monitoring activities. All NextEra sites are located on major bodies of water (their EPZs being approximately 40% water or greater) with no requirements nor capabilities for monitoring activities on these bodies of water. As each site's EPZ is ~40+% water, there is not as much area to cover for the field monitoring teams. With NextEra EPZs being effectively smaller than landlocked sites, less personnel are needed to cover an effectively smaller EPZ.

Additionally, the NUREG-0654 R2 technical basis for the ERO staffing guidance includes the following clarification:

The onsite FMT should not be staffed if the radiological conditions jeopardize the safety of the FMT, typically after a Site Area Emergency has been declared.

Based upon NRC guidance two Field Monitoring Teams are sufficient to monitor radiological conditions after a SAE is declared. By not designating onsite and offsite FMTs, a total of two FMTs can sufficiently provide radiological monitoring at NextEra stations under all conditions.

#### 2.1.7 **[Potential RIE 1-7]** No OSC RP Supervisor Position

The proposed emergency plan does not include an OSC RP Supervisor minimum staff ERO position to the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

An ... RP Supervisor should be staffed within 90-minutes of an SAE ECL, or greater, and is typically staffed in the OSC. The OSC Supervisor can effectively manage the craft [personnel] resources for the additional 30-minutes prior to the [supervisory] respond, as demonstrated through drills and exercises, without compromising the staff's reasonable assurance finding in accordance with 10 CFR 50.47(a).

The Lead OSC Supervisor is assigned the RP aspect of the Supervision of Repair Team Activities. To ensure that Lead OSC Supervisor position can perform the RP supervision sub-function, their ERO training / qualification program will include previous RP Supervisor experience or will receive training to supervise RP emergency response

tasks. See Section O of the proposed emergency plan for the description of the qualification of the Lead OSC Supervisor.

OSC radiation protection personnel responding to the event will report to the Lead OSC Supervisor. With 3 RPTs and 2 RPQIs responding, an RPT can assist the Lead OSC Supervisor and FIN Supervisor with coordination of RP activities needed to dispatch OSC teams, thus not overburdening the Lead OSC Supervisor. If there is a particular question for RP supervision, the TSC RP Coordinator would also be available to answer or coordinate a response to questions.

# 2.1.8 [Potential RIE 1-8] Single Craft Supervisor Position

The proposed emergency plan does not assign OSC maintenance supervisors for each craft. Specifically, this change reduces the number of OSC craft supervisor minimum staff ERO positions used for the Supervision of Repair Team Activities function from three (3) to one (1).

This change deviates from the NUREG-0654 R2 minimum staff ERO guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

An Electrical Supervisor, a Mechanical Supervisor, an I&C Supervisor ... should be staffed within 90-minutes of an SAE ECL, or greater, and is typically staffed in the OSC. The OSC Supervisor can effectively manage the craft [personnel] resources for the additional 30-minutes prior to the [supervisory] respond, as demonstrated through drills and exercises, without compromising the staff's reasonable assurance finding in accordance with 10 CFR 50.47(a).

The FIN Supervisor fills the supervisor role for mechanical, electrical and I&C craft disciplines. This is a deviation from NUREG-0654 R2 guidance which only discusses combining Electrical and I&C supervisory roles.

The normal station maintenance organization allows for the management of craft personnel under a single supervisor hierarchy. The position of FIN Supervisor is filled by management and supervisory personnel from the Maintenance Department who are familiar with the direction of all disciplines within the department. OSC performance under this organizational structure has been demonstrated in numerous evaluated exercises and remains consistent with the acceptable OSC staffing hierarchy of the current emergency plan.

### 2.1.9 [Potential RIE 1-9] Fewer Craft Responders

The proposed emergency plan reduces the number of Electricians from two (2) to (1) and the number of Mechanics from (2) to one (1) for the Repair Team Activities function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Repair Team Activities function from five (5) to three (3).

This change deviates from the current emergency plan minimum staff ERO position requirements.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

A minimum number of maintenance personnel should respond to an event as part of the ERO, with more personnel available on an as-needed basis depending on the event. The augmentation (support) of the electrician and mechanic positions should occur within 60-minutes of an Alert ECL, (or greater), and is typically staffed in the

OSC. The augmentation (support) of the I&C position should occur within 90-minutes of an Alert ECL, or greater, and is typically staffed in the OSC.

Maintenance personnel are not assigned specific ERO response tasks in the proposed emergency plan. Maintenance personnel designated as minimum augmenting ERO are used as needed for skill of craft tasks.

Staffing for events which involve extensive damage has been analyzed in accordance with NEI 12-01 and are addressed under FLEX requirements.

This change is consistent with the staffing plan of NUREG-0654 R2.

### 2.1.10 [Potential RIE 1-10] No IT Technician ERO Positions

The proposed emergency plan does not assign IT Technicians in the TSC and EOF/JIC. Specifically, this change reduces the number of IT Technicians minimum staff ERO positions used for the Information Technology function from two (2) to zero (0).

This change deviates from the NUREG-0654 R2 minimum staff ERO guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

Advances in technology have led to significant enhancements in many areas of emergency response, such as communications, monitoring, displays, digital procedures, etc. Licensees should consider the use of this technology whenever it enhances their ability to protect the health and safety of the public. However, if the implementation of the emergency plan is so reliant on this technology that without it, the emergency plan could not be implemented, then an IT Lead should augment (support) the response within 60-minutes of an Alert ECL, or greater, if the TSC/OSC has this technology; and within 60-minutes of an SAE ECL, or greater, if the EOF or JIC/JIS has this technology. If the licensee has capable backup plans for if/when this technology fails, then this function is not necessary. In other words, if the ERO is reliant upon technology such that its loss would prevent the ERO from functioning, then a support position should be part of the ERO to assist in recovery of this technology. If the loss of this technology would lead to the implementation of backup strategies, then this position would not need to be part of the ERO and can be called upon as-needed. Licensees should consider using the listing of critical digital assets, identified in accordance with 10 CFR 73.54, as the basis for determining if this position should be considered part of the EROs augmented response.

Per NUREG-0654 R2, minimum staff ERO IT positions are only required to be described in the emergency plan if critical digital assets (CDAs) are identified per 10 CFR 73.54, Protection of digital computer and communication systems and networks. The proposed emergency plan relies on DCS/ERDADS for monitoring plant parameters, which has been determined to be a CDA. The IT process for addressing issues with CDAs operates full time outside the emergency plan on a 24/7 basis. Additionally, NextEra maintains an IT Help Desk 24 hours per day, 7 days a week. Many computer issues are addressed remotely with an IT specialist through the Help Desk.

Each of the EP related digital assets were evaluated as part of implementation of the Cyber Security Rule, 10 CFR 73.54(b). Under NEI 13-10, "Cyber Security Control Assessments," EP Critical Digital Assets have been assessed and controls have been put in place to protect the assets against cyber-attack. In conjunction with these controls, alternate administrative, non-digital, or adequately independent means have been put in place for performing each EP function, should the digital component or program fail.

Performance of digital equipment used by EP has shown to be acceptable during drills and exercises, and through routine inventory and surveillance checks. Performance of digital assets is monitored through either the Corrective Action Program (CAP) or the drill and exercise critique process. Performance trends are monitored, corrective actions are issued, and compensatory measures are taken as necessary.

With the IT department process for 24/7 coverage and built-in redundancy for communication systems and digital EP assets, NextEra has identified that there is no need to maintain an IT Technicians as minimum staff ERO positions.

#### 2.2 ERO Augmentation Analysis

**Note:** Discussion around the technology Emergency Response Notification for Incidents and Events (ERNIE) are written in the future present tense throughout this document. The system is not installed at this facility currently but will be as part of the installation of the Common Emergency Plan.

The ERO Augmentation Analysis compares and evaluates the current emergency plan on-shift and minimum staff ERO positions against those in the proposed emergency plan and in NUREG-0654 R2 guidance. Augmentation deviations in the proposed emergency plan from the current emergency plan and NUREG-0654 R2 are categorized as potential RIEs and evaluated to determine whether the timeliness to perform the function is sustained without overburden of the on-shift staff.

Refer to Attachment 1, ERO Staffing Plan Comparison Table, for a side-by-side summary of staffing and augmentation comparison between NUREG-0654 R2 Table B-1, the current emergency plan, and the proposed emergency plan.

NUREG-0654 R2 establishes 60 and 90-minute minimum staff ERO augmentation time requirements for the TSC and OSC positions at the Alert emergency classification level; and a 60-minute minimum staff ERO augmentation time requirement for the EOF at the Site Area Emergency classification level.

The current emergency plan follows a 30 / 60-minute augmentation scheme as approved by the NRC with the following main elements:

- All ERO personnel are notified at the Unusual Event emergency classification level (response to facilities is elective for the Shift Manager) and called out to respond to their assigned facility at the Alert emergency classification level.
- The TSC and OSC are required to be activated at the Alert emergency classification level.
- The EOF is required to be activated at the Site Area Emergency classification level.
- The JIC is activated as soon as possible at an Alert or higher emergency classification level when determined appropriate with the offsite agencies, and whenever the EOF is activated.

The proposed emergency plan follows a 60 and 90-minute augmentation scheme with the following main elements:

- All ERO personnel are notified at the Unusual Event emergency classification level (response to facilities is elective for the Shift Manager) and called out to respond to their assigned facility at the Alert emergency classification level.
- The TSC, OSC, and EOF are activated at the Alert emergency classification level.
- NextEra implements JIS practices that are capable of performing the media information function at all emergency classification levels.

• The near-site JIC is activated when determined appropriate with the offsite agencies (at an Alert or higher emergency classification level).

The ERO augmentation analysis concludes that the differences in times between the proposed common emergency plan 60 and 90 minute response criteria and the NUREG-0654 R2 60 and 90 minute response criteria does not adversely delay turnover of responsibilities or negatively impact/overburden the ability of the on-shift personnel to perform operational actions or key functions. This alternate staffing approach continues to maintain initial facility accident response in all key functional areas at all times and provides timely augmentation of response capabilities.

#### 2.2.1 [Potential RIE 2-1] Site Emergency Director at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time for the Site Emergency Director minimum staff ERO position that performs the Command and Control function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

This function is typically assigned to the Operations Shift Manager (OSM). The augmentation (relief) of this position is intended to relieve the OSM of EP functions so that the OSM can focus on the event response from an operations perspective. This should occur within 60-minutes of an Alert ECL declaration, or greater, and is typically a position staffed within the TSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Per the guidance in NUREG-0654, Table B-1, an augmented "Senior Manager" should fulfill the "Emergency Operations Facility Director" major task at 60 minutes. A licensee requesting a change in staff augmentation requirements that would have the lead manager unavailable to assume command and control within 60 minutes of the initial emergency declaration should show that the on-shift staff includes enough qualified supervision such that one supervisor will assume the emergency director role. The licensee should show that the on-shift supervisor performing the manager actions will not have any additional duties (e.g., each unit under the direction of a unit supervisor, a shift manager providing oversight of the plant response, and a designated emergency director responsible for emergency plan implementation).

The Shift Manager is given overall command and control with regard to ERO response activities. The position is used to perform Emergency Classification Level (ECL) determinations and develop Protective Action Recommendations (PARs), and to direct or perform ORO notification.

Historically, actual events have resulted in single ECL declarations with no further escalation. Realistic event progression that challenges multiple fission product barriers is relatively slow as demonstrated by the events at TMI and Fukushima. In this case, immediate plant operations and ERO response actions occur with 60 minutes of actual events and the on-shift staff are not burdened (tested) with multiple classifications.

Planning for a wide range of events, including rapidly progressing severe accidents (RPSA) is also required. These "fast breaker" events rise to the SAE or GE classification level without progressing through the lower ECLs. In this case, immediate plant operations and ERO response actions occur with 60 minutes of the RPSA scenario, and the on-shift staff are not burdened (tested) with multiple classifications.

Event scenarios that require escalation of the ECL prior to ERO augmentation are included in drills and exercises for the on-shift ERO. Technology and process enhancements including communications (ERNIE), ERDS, EAL matrix, PAR flowchart, etc. have reduced the time and attention it takes to perform tasks along with enhancing the effectiveness and efficiency of task performance. In addition, NUREG-0654 R2 has added a Classification Advisor position to assist and work in coordination with the Shift Manager, which NextEra has included as a collateral duty in the on-shift complement.

All Initiating Conditions (ICs) need to be demonstrated within the 8-year cycle. All Unusual Event and Alert level ICs are preformed from the Control Room. Thus, the opportunities for the Shift Manager to demonstrate the ability to perform emergency and operations responsibilities are provided multiple times over the 8-year cycle.

The demonstration and evaluation of the Shift Manager to perform their emergency plan functions is continuously evaluated during emergency planning drills/exercises and operations training simulator sessions. Various scenarios are used to evaluate the Shift Manager's ability to perform the following emergency planning functions, technical specification responsibilities and operations oversight.

Operations training simulator sessions test and evaluate the Shift Manager's ability to effectively and efficiently perform all required functions / responsibilities until the event is stabilized (session is complete); this in some circumstances is greater than the 90 minutes ERO response time. Note – there is no minimum required length of time for the training sessions.

Licensed Operator Continuing (LOR) training periodically has scenarios that extend to 90 minutes without augmented ERO involvement. For example, a training scenario is performed on a periodic basis to ensure that a FLEX Beyond Design Basis External Event can be mitigated by the minimum on-shift staff. The FLEX scenario assumes that the ERO will not be on site to provide support for a minimum of 6 hours. While this is covered under 10 CFR 50.155 and not Appendix E, the example is given as a major event where augmented ERO response is not provided while the site compliment is under heavy demand for action to mitigate the event.

NextEra Energy has added a drill/exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for at least 90 minutes. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

The Site Emergency Director 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the Command and Control function.

On Shift impact of change from 60 to 90 minutes: The shift manager oversees site response until relieved. As outlined above, the Shift Manager is in oversight role of the plant operations at this point so any additional classifications or PAR decision making from degrading equipment is not an additional burden.

Due to the Shift Managers and Site Emergency Directors having the similar qualifications and similar backgrounds, the skillsets that the Site Emergency Directors bring with them are similar to those of the Shift Manager.

The (Emergency) Classification Advisor role on shift is also able to perform better as the principal assistant to the Shift Manager due to technological improvements outlined in their section below.

One function that the ERO may take on is the non-critical communications with offsite agency leadership if an event is in progress. These communications are predominantly clarification questions that take 1-3 minutes to answer as their ERO yet in place. This does not add a significant additional burden on the Shift Manager.

When the Site Emergency Director (SED) assumes command and control, the SED routinely involve the Shift Manager in all classification and PAR decision making for validation so the additional burden of stating the classification as it is coming from the SM vice from the TSC would not result in an overburden.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

#### 2.2.2 [Potential RIE 2-2] Classification Advisor at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC Classification Advisor minimum staff ERO position that performs the Emergency Classifications function.

This change deviates from the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC.

Maintaining the ability to perform this function at all times ensures that ECL decisions, and as applicable, the PAR decisions, are timely and accurate as these decisions have a direct relationship to public health and safety from the consequences of a radiological event. This function shall work in coordination with the OSM, or Emergency Coordinator, depending on which position is in command and control, and as a result should be available on shift and in the TSC.

The on-shift Classification Advisor is given a limited role with regard to ERO response activities. The position is used to second check Emergency Classification Level (ECL) determinations and Protective Action Recommendations (PARs) developed by the Shift Manager, and to support ORO notification information accuracy. The on-shift Classification Advisor has received training to perform their assigned EP functions and assist the Shift Manager with emergency responsibilities.

Historically, actual events have resulted in single ECL declarations with no further escalation. Realistic event progression that challenges multiple fission product barriers is relatively slow as demonstrated by the events at TMI and Fukushima. In this case, immediate plant operations and ERO response actions occur with 60 minutes of actual events and the on-shift staff are not burdened (tested) with multiple classifications.

Planning for a wide range of events, including rapidly progressing severe accidents (RPSA) is also required. These "fast breaker" events rise to the SAE or GE classification level without progressing through the lower ECLs. In this case, immediate plant operations and ERO response actions occur with 60 minutes of the RPSA scenario, and the on-shift staff are not burdened (tested) with multiple classifications.

Event scenarios that require escalation of the ECL prior to ERO augmentation are included in drills and exercises for the on-shift ERO. Technology, process and procedure enhancements to classification, notification and PAR development (such as Emergency Response Notification for Incidents and Events (ERNIE), ERDS, EAL matrix, PAR flowcharts, etc.) have simplified response activities and enhanced the effectiveness and efficiency of task performance. The on-shift Classification Advisor position's ability to perform second checks specifically benefits from these advancements such that continuation of their ERO related tasks from 60 to 90 minutes is not a burden.

All Initiating Conditions (ICs) need to be demonstrated within the 8-year cycle. All Unusual Event and Alert level ICs are preformed from the Control Room. Thus, the opportunities for the on-shift Classification Advisor to demonstrate the ability to perform emergency and operations responsibilities are provided multiple times over the 8-year cycle.

The demonstration and evaluation of the on-shift Classification Advisor to perform their emergency plan functions is continuously evaluated during emergency planning drills/exercises and operations training simulator sessions. Various scenarios are used to evaluate the on-shift Classification Advisor's ability to perform the following emergency planning functions, technical specification responsibilities and operations oversight.

Operations training simulator sessions test and evaluate the on-shift Classification Advisor's ability to effectively and efficiently perform all required functions / responsibilities until the event is stabilized (session is complete); this in some circumstances is greater than the 90 minutes ERO response time. Note – there is no minimum required length of time for the training sessions.

Licensed Operator Continuing (LOR) training periodically has scenarios that extend to 90 minutes without augmented ERO involvement. For example, a training scenario is performed on a periodic basis to ensure that a FLEX Beyond Design Basis External Event can be mitigated by the minimum on-shift staff. The FLEX scenario assumes that the ERO will not be on site to provide support for a minimum of 6 hours. While this is covered under 10 CFR 50.155 and not Appendix E, the example is given as a major event where augmented ERO response is not provided while the site compliment is under heavy demand for action to mitigate the event.

NextEra Energy has added a drill/exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for at least 90 minutes. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement for the TSC Classification Advisor minimum staff ERO position does not impact the capability or timeliness to perform the Emergency Classifications function or overburden the on-shift position.

On Shift impact of change from 60 to 90 minutes: The ECA position is the principal support to the Shift Manager or Site ED, depending on their location. The delay of the ECA arrival by an additional 30 minutes will have the Shift ECA performing the remote coordination support and ERNIE communications for the additional time. These functions are part and parcel to their function and practiced regularly.

The (Emergency) Classification Advisor role on shift as the principal assistant to the Shift Manager is enhanced due to technological improvements outlined above.

With the technological advances that ERNIE has given to the ECA, they are more able to provide co-equal level of knowledge and skill assistance to the Shift Manager for longer time periods due to them not being saddled with manual tasks of creating forms, briefing the shift communicator on the specific forms, and activating the ERO.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

#### 2.2.3 [Potential RIE 2-3] ORO Communicator at 90 Minutes

The proposed emergency plan adds 60 minutes (30 for NUREG-0654 guidance) to the augmentation response time to the TSC ORO Communicator minimum staff ERO position that performs the State/County notifications aspect of the Communications function.

This change deviates from the current emergency plan 30-minute ERO response time requirements and NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this position should occur within 60-minutes of an Alert ECL, or greater, and is intended to relieve the on-shift staff of this EP function. This function should consist of 2 staff members to fulfill the communication needs, at a minimum: 1 for the NRC and 1 for ORO notification and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

To adequately support the elimination or extension of the two 60-minute responders, the licensee should show that two on-shift positions are identified to fill the 60-minute

responder's role to "Notify licensee, State, local and Federal personnel [and] maintain communication." The licensee should show that these positions are not assigned other tasks that may prevent the timely performance of their assigned notification or communication functions, as specified in the emergency plan. The licensee should discuss how communication technologies employed by the proposed on-shift staff will support timely, effective, and reliable notifications. Additionally, the communications technologies should be referenced in the emergency plan to ensure that future changes are reviewed using the RG 1.219 change process, as they were used as the basis for the proposed change.

Technology advancements of Emergency Response Notification for Incidents and Events (ERNIE) allows a streamlined process for ERO notification and ORO notification. Specifically, the technology advancements have enhanced initial notification to the ORO by using an electronic system that contacts the ORO warning points and emergency management staff via email, text and verbal computer-generated voice communications, thus eliminating the need for a communicator to perform the verbal portion of the initial notification.

ORO activation occurs from the site's warning points based upon the initial notification form information. The forms are negotiated and approved with OROs to provide information needed to make initial response decisions. As such, there should be minimal need for OROs to request additional information from the site communicators. ERNIE provides the site with validation that the information has been received by the OROs.

If any of the OROs need additional information prior to ERO activation (90 minutes), the NextEra control rooms are equipped with speaker and/or headset phones which aid them in the performance of the communication function. The technical advancement allows personnel to perform the communication task without negatively impacting the performance of other emergency plan or operations responsibilities.

NextEra Energy has added a drill/ exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for 90 minutes as a verification that the shift can perform their function with no assistance. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the State/County notifications aspect of the Communications function. The OROs concur with the NextEra Common

Emergency Plan changes including the 90-minute ERO augmentation (refer to Enclosure 10).

On Shift impact of change from 60 to 90 minutes: The ORO communicator envisioned by NUREG-0654 R2 Table B1 was a manual intense process of reading off of paper notification forms and using one of many site telephone systems for external communications during the notification phase of an event. Additional functions would be communicating with state/county Emergency Operations Center staff to provide updates. As the (Emergency) Classification Advisor is responsible for ERNIE operations, they have taken on the below functions (via technology) of the ORO communicator:

- 1. ORO warning point call providing the warning point operators with information from the state/county notification form
- 2. Verification of message receipt.
- 3. Distribution of the notification form, usually by fax, to other ERO facilities and ORO warning points/EOCs

The offsite agencies receive annual training on EAL changes, so they know the basics of what the EALs are and what is on the notification forms.

One function that the ERO may take on is the non-critical communications with offsite agency leadership if an event is in progress. These communications are predominantly clarification questions that take 1-3 minutes to answer as their ERO yet in place. This does not add any significant burden on the shift staff. The timing of ORO response matches similarly to the site ERO response of 90 minutes. Each of the agencies have agreed to our 90 minute ERO response time as shown with the letters of support as part of the submittal.

If the offsite agency needs additional information, as discussed above, the control room can provide the information that is needed with minimum burden to the on-shift staff.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

### 2.2.4 [Potential RIE 2-4] ENS Communicator at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC ENS Communicator minimum staff ERO position that performs the NRC notifications aspect of the Communications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this position should occur within 60-minutes of an Alert ECL, or greater, and is intended to relieve the on-shift staff of this EP function. This function should consist of 2 staff members to fulfill the communication needs, at a minimum: 1 for the NRC and 1 for ORO notification and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

To adequately support the elimination or extension of the two 60-minute responders, the licensee should show that two on-shift positions are identified to fill the 60-minute responder's role to "Notify licensee, State, local and Federal personnel [and]

maintain communication." The licensee should show that these positions are not assigned other tasks that may prevent the timely performance of their assigned notification or communication functions, as specified in the emergency plan. The licensee should discuss how communication technologies employed by the proposed on-shift staff will support timely, effective, and reliable notifications. Additionally, the communications technologies should be referenced in the emergency plan to ensure that future changes are reviewed using the RG 1.219 change process, as they were used as the basis for the proposed change.

Technology advancements using continuous live ERDS transmission and Emergency Response Notification for Incidents and Events (ERNIE) allows a streamlined process for NRC notification. Specifically, the technology advancements have enhanced the NRC Headquarters Operations Office (HOO) initial notification by using an electronic system that contacts the HOO.

The shift communicator is able to communicate immediately, not to exceed 1 hour, with the NRC HOO to provide real time information and an open line if desired. The NextEra control rooms are equipped with speaker and/or headset phones which aid the shift communicator in the performance of the communication function. The technical advancement allows personnel to perform the communication task without negatively impacting the performance of other emergency plan or operations responsibilities.

This technology allows for a single communicator to perform as the NRC communicator and have collateral duties throughout the additional 30 minutes until relieved by the TSC ENS Communicator.

NextEra Energy has added a drill/exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for 90 minutes as a verification that the shift can perform their function with no assistance. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the NRC notifications aspect of the Communications function.

On Shift impact of change from 60 to 90 minutes: The shift communicator role is primarily responsible for communicating with the NRC in the NEE designed scheme. ORO communications are handled by ERNIE (technology) and the ECA as outlined above in this document.

The shift communicator will then follow up with the NRC (after ERNIE delivers the first message electronically) immediately (not to exceed) 1 hour to validate receipt of the information, answer and answer any additional questions. The communicator will be available on the open line with the NRC as they are in the process of determining their response model to the event. The shift communicator being on the open line with the NRC for an additional 30 minutes will prevent them from being added back into the response pool; this delay was validated during the staffing study as the communicator was used in their task for 120 minutes. All other shift staff were capable of responding with no delays.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

#### 2.2.5 [Potential RIE 2-5] TSC RP Coordinator at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC RP Coordinator minimum staff ERO position that performs the Supervision of Radiation Protection Staff and Site Radiation Protection function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

This function is important for effective emergency response to a radiological event because the management of RP resources, and the assistance this position provides the Emergency Coordinator, is crucial for response to radiological events. Radiological events can be very significant and constantly evolving, and require significant expertise in radiation and radiological consequences. The evaluation of radiological events, and the development of effective protective action recommendations, requires this expertise to support the Emergency Coordinator in making these decisions. This position is also responsible for the direction and protection of FMTs. The augmentation (relief) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC.

The TSC Radiation Protection Coordinator relieves the Shift Manager of the Supervision of Radiation Protection Staff and Site Radiation Protection function.

On-shift radiation protection personnel respond to abnormal radiological conditions, including Area Radiation Monitor and Process Radiation Monitor alarms, in accordance with RP procedures and report their actions and information to the Shift Manager, with little or no required supervision. Other on-shift radiation protection personnel emergency functions/responsibilities are performed without the need for direct supervision of the Shift Manager.

Technology and process enhancements in radiation protection including dosimetry and personnel monitoring have reduced the on-shift RP task burden by allowing operations and other non-RP shift personnel to perform most activities without the need for dedicated RP coverage. Thus, the need for the Shift Manager to coordinate RP coverage activities is significantly reduced.

The 90-minute response for OSC maintenance and radiation protection personnel credits the enhancement of the NextEra FLEX equipment and strategies. By accounting for FLEX equipment and strategies that eliminate or prolong the onset of core damage and any radiological release of activity the RP challenges are simplified and the need for a 60 minute radiation protection personnel response, and thus a 60 minute Radiation

Protection Supervision response is diminished. Coordination of RP supervision response time with full TSC and OSC augmentation provides for a less complicated transition of responsibilities.

NextEra Energy has added a drill/ exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for 90 minutes as a verification that the shift can perform their function with no assistance. This includes the Shift Manager directing and supervising RP functions and activities.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the Supervision of Radiation Protection Staff and Site Radiation Protection function.

On Shift impact of change from 60 to 90 minutes: The Shift Manager is overall responsible for the supervision of RP staff and site radiation protection function.

With the Site RP Coordinator filling both Table B1 roles of Site RP Coordinator and OSC RP Supervisor, this position has responsibility of providing direction to RP staff and will thus be filled with dayshift RP management, supervisors, analysts, and staff.

While these personnel do bring a skillset that is matched only by the RPT on shift, they do provide additional knowledge and experience that the shift manager may not have in their arsenal. To mitigate this issue, throughout the years emergency operations procedures have been enhanced by incorporation of the most recent revisions of PWR Owner's Group guidance, this has greatly aided the shift RP response to include specific direction on directing surveys and other RP functions. The AOP/EOP procedure sets have specific guidance for direction and control of RP/QI resources during an event. The shift manager has the authority to provide immediate dose extensions for life saving, facility saving, or prevention/mitigation of release. This decision is informed by the rest of the operating crew and procedure sets. This again is part and parcel of the SM requirements and is not an undue burden for the additional 30 minutes.

Performing a comparative task analysis (refer to Analysis 1) between the Shift Manager and the Site RP Coordinator, the tasks are same/ similar between the SM and SRPC. Where there is a gap is with experience. Experience cannot be mitigated with training as the knowledge requirements for the positions are same/ similar. Experience is mitigated through procedure use and adherence. As outlined above, all NEE sites have AOP/EOP sets that are based off most recent PWR Owner's guidance which incorporates industry best practices, including RP direction.

#### 2.2.6 [Potential RIE 2-6] Dose Assessors at 60 and 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the Dose Assessor minimum staff ERO positions that perform the Dose Assessments / Projections function.

This change deviates from the current emergency plan 30-minute ERO response time requirements.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC. For an SAE ECL, or greater, this. position should be staffed in the EOF as the EOF is primarily intended to coordinate with offsite response officials when developing protective action strategies for the public.

Maintaining the ability to perform dose assessments/projections at all times ensures that the consequences of a radiological event, to the public, are effectively mitigated by providing timely dose related information to the Emergency Coordinator (TSC) or Emergency Director (EOF) depending on which position is in command and control. As a result, this position (function) is expected to be available on shift, in the TSC, and in the EOF depending on the ECL declared.

The Remote Dose Assessor will relieve the on-shift Dose Assessor within 60 minutes of event declaration of an Alert or higher emergency classification level. The EOF Dose Assessor is available to perform their dose assessment functions within 90 minutes of event declaration of an Alert or higher emergency classification level.

Additionally, personnel qualified as on-shift Dose Assessors are trained in dose assessment for all NextEra sites such that an unaffected site shift Dose Assessor could be called upon to support dose assessment activities at an affected unit prior to ERO activation.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

The proposed emergency plan conforms to the NUREG-0654 R2 augmentation response time criteria for the Dose Assessments / Projections function.

#### 2.2.7 [Potential RIE 2-7] Radiation Protection Personnel at 90 Minutes

The proposed emergency plan adds 60 minutes (30 for NUREG-0654 guidance) to the augmentation response time to the radiation protection personnel minimum staff ERO positions that perform the Radiation Protection function.

This change deviates from the current emergency plan 30-minute ERO response time requirement and NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for augmenting radiation protection personnel states that:

While not all Alert ECLs (or lower) have radiological consequences, licensees should develop their ERO staffing plans for a worst-case scenario from a radiological risk perspective, i.e., an event which results in the immediate (within 60-minutes) loss of 2 or more fission product barriers leading to significant and unknown radiological conditions. The augmentation (support) of this position should occur in two stages: within 60 minutes of an Alert ECL or greater, 3 additional qualified RP staff should be available, and within 90 minutes of an Alert ECL, or greater, an additional 3 additional qualified RP staff should be available, and both are typically staffed in the OSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Radiation protection personnel perform multiple roles during normal and emergency plant operations. These roles include access control, personnel monitoring, and dosimetry, in addition to HP coverage for repair and corrective actions, search and rescue, first aid, and firefighting during emergency response operations. Per the quidance in Table B-1 of NUREG-0654, there should be two augmented responders at 60 minutes for the major task of "Radiation Protection." To adequately support an extension in response timing of the two radiation protection 60-minute responders to 90 minutes, the licensee should show that the on-shift HP staffing includes as a minimum, four HP technicians in total for the site. The extra HP technicians are needed for in-plant protective actions for the other personnel added to the on-shift staffing to compensate for the extension in augmentation time, and to assess any offsite releases of radioactive materials. Additionally, the licensee request should demonstrate that on-shift HP technicians will be relieved of the need to perform access control, personnel monitoring, and dosimetry-related tasks, thereby freeing these personnel to cover vital response activities (e.g., HP coverage for repair and corrective actions, search and rescue, first aid, and firefighting). NRC staff will consider whether the basis for the justification includes the availability of installed area, process, airborne and effluent radiation monitors, automated systems and information technology solutions, and enhanced work processes. The licensee should include supporting tools and processes that will be considered such as portal monitors, self-alarming dosimeters, and automated access control systems for the RCA that maintain active radiation work permits that are readily available if an emergency is declared (e.g., the system verifies qualifications, dose margins, and access requirement).

Three (3) RP Technician and two (2) RP Qualified Individual 90-minute minimum staff ERO positions report to the Lead OSC Supervisor and provide radiation protection support.

Through equipment, process, and training enhancements the on-shift staff can initially respond to Design Basis and Beyond Design Basis (BDB) events without the support of an augmented ERO. As codified by 10 CFR 50.155, NextEra FLEX equipment provides the on-shift staff with additional resources when installed plant equipment is lost or

damaged. Generally, FLEX provides portable backup equipment onsite that can be used to supplement or replace installed plant equipment in maintaining long-term core cooling, spent fuel cooling, and containment integrity. Movement of FLEX equipment, including installation into plant systems and its operations (electrical, fluid, etc.) is performed by on-shift personnel.

Due to the availability of FLEX equipment, NextEra stations have diverse protection against loss of ECCS capability and other systems, which provides a basis for determination that no immediate ECCS repair and corrective actions are likely necessary for on-shift personnel prior to augmentation of maintenance personnel. The FLEX/BDB process and equipment, and the operating emergency procedures (EOP, AOP, etc.) are designed to be implemented with the minimum shift staff. By accounting for FLEX equipment and strategies that eliminate or prolong the onset of core damage and any radiological release of activity the RP challenges are simplified and the need for a 60 minute radiation protection personnel response is diminished.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

On Shift impact of change from 60 to 90 minutes: Shift RP functions are designed around requirements in AOP/EOP procedures and validated against FLEX demands. With the RP/QI personnel on shift, this allows for multiple shift "teams" working in the Radiologically Controlled Area performing steps needed in the AOP/EOP procedures. Changing radiological conditions are an integral part of operations functions in these procedure sets and the operators are trained to expect those conditions as they are realigning systems. As the RP/QIs are matched with the number of teams needed for response, having those personnel continue performing that function without additional RP response is appropriate.

ERO RP response is going to be focused on ERO responders – which is what they are staffed based on. Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

#### 2.2.8 [Potential RIE 2-8] Both Offsite FMTs at 90 Minutes

The proposed emergency plan adds 60 minutes (30 for NUREG-0654 guidance) to the Field Monitoring Team minimum staff ERO positions that performs the offsite field monitoring aspect of the Field Monitoring Teams function.

This change deviates from the current emergency plan 30-minute ERO response time requirement and NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

- An offsite FMT should be staffed, consisting of a monitor and a driver. This offsite FMT is responsible for locating, monitoring, and tracking a radioactive plume, as well as obtaining environmental samples as necessary (air, water, vegetation, etc.). This team should be staffed within 60-minutes of an Alert ECL, or greater, in order to be ready to respond to a radiological release, or to detect radiation in the field thus confirming and quantifying the release. This supports the applicable PAR decision-makers in developing effective PARs.
  - i. The monitor should be qualified to assess radiation and contamination levels, but need not be an ANSI qualified RP Technician as long as the FMT is under the direct supervision of senior staff in the TSC or EOF.
  - iii. The driver should be knowledgeable about the vehicle and the proposed routes to be traversed.
- Another offsite FMT should be staffed, consisting of a monitor and a driver. This offsite FMT is also responsible for locating, monitoring, and tracking a radioactive plume, as well as obtaining environmental samples (air, water, vegetation, etc.). This team should be staffed within 90-minutes of an Alert ECL, or greater, in order to be ready to respond to a radiological release, or to detect radiation in the field thus confirming and quantifying the release. This supports the applicable PAR decision-makers in developing effective PARs. An additional 30-minutes in response is acceptable in that this second FMT is a backup to the first FMT, and while both FMTs are expected to respond to an event to better coordinate radioactive plume tracking action(s), allowing for an additional 30-minutes provides licensees some flexibility in staffing this ERO function without compromising the reasonable assurance finding in accordance with 10 CFR 50.47(a).
  - i. The monitor should be qualified to assess radiation and contamination levels, but need not be an ANSI qualified RP Technician as long as the FMT is under the direct supervision of senior staff in the TSC or EOF.
  - iii. The driver should be knowledgeable about the vehicle and the proposed routes to be traversed.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Per the guidance of NUREG-0654, Table B-1, there should be four augmented responders at 60 minutes—two for off-site surveys, one for on-site surveys, and one for in-plant surveys. To adequately support an extension of these responders to 90 minutes, the licensee should show that the on-shift HP staffing includes a minimum of four HP technicians in total for the site. The licensee should demonstrate that two HP technicians, in excess of the number evaluated previously for extending the 30-minute responders, are available for in-plant protective actions for the other maintenance personnel that need to be added to the on-shift staffing to compensate for the extension in augmentation time for the major task of "Repair and Corrective Actions," and to perform surveys to assess any off-site release of radioactive materials.

NextEra off-site Field Monitoring Team augmentation is 90 minutes for both teams versus one team at 60 minutes and one team at 90 minutes.

FLEX equipment and strategies eliminate or prolong the onset of core damage and any radiological release of activity, and thus simplify the RP challenges and diminish the need for a 60 minute Field Monitoring Team response.

The 60 minute response basis for the first off-site Field Monitoring Team is to be ready to respond to a radiological release, or to detect radiation in the field for any ECL at an Alert or above. NextEra provides dedicated vehicles and equipment to facilitate the rapid deployment of personnel upon their arrival.

- Vehicles are maintained and fueled such that the Field Monitoring Team Driver is only required to perform a quick walk-around safety check before operating.
- Equipment/supply kit inventories are administratively maintained so that Field Monitoring Team personnel are not required to verify contents or perform lengthy equipment checks.
- Vehicles and equipment are stored together in a location that facilitates rapid deployment outside the Protected Area.
- Initial Field Monitoring Team deployment strategy locates personnel in downwind areas near the site boundary prior to a release that promptly supports EAL identification and PAR determination.

This pre-staging and readiness of Field Monitoring Team resources significantly reduces the time it takes personnel to be ready to respond to and identify a radiological release, thus also facilitating a 90 versus 60 minute augmentation response time.

On Shift impact of change from 60 to 90 minutes: FMT function not being available for offsite response at 60 minutes is covered by NEI 99-01 revision 6 EALs that incorporate "Table R-1" values, which are pre-calculated effluent monitor readings that equate to worse case release value that allows for the shift to make a determination without the need for dose assessment or FMTs.

Unmonitored releases are evaluated using in plant area radiation monitors and plant physical responses (containment pressure erratic indications, flow rates not as expected, etc.) which would trigger the operating crew to look for leaks. Direct radiation monitor readings of the unmonitored release, if needed, would be completed by competent operations staff or RP staff. On the surface this may look like an additional function on the shift staff; however, it is standard operations response to look for leaks and abnormalities as events unfold to ensure that they are in the appropriate response procedures.

Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

# 2.2.9 [Potential RIE 2-9] Reactor Engineer at 60 minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the Reactor Engineer minimum staff ERO position that performs the Engineering function.

This change deviates from the current emergency plan 30-minute ERO response time requirement.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO guidance states that:

The augmentation (relief) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC ....

An engineer to provide expertise in electrical/instrumentation and control (I&C) systems and equipment supports the evaluation of these systems/equipment and supports the development of repair plans if necessary. The augmentation (support) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC....

An engineer to provide expertise in mechanical systems and equipment supports the evaluation of these systems/equipment and supports the development of repair plans if necessary. The augmentation (support) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC....

The proposed emergency plan conforms to the NUREG-0654 R2 augmentation response time criteria for the Engineering function.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

#### 2.2.10 [Potential RIE 2-10] OSC Supervisors at 90 minutes

The proposed emergency plan adds 30 minutes to the augmentation response time for the Lead OSC Supervisor and FIN Supervisor minimum staff ERO position that performs the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan 60-minute ERO response time requirement for the OSC Manager and OSC Supervisor, and the NUREG-0654 R2 60-minute ERO response time guidance for the Lead OSC Supervisor.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

An Electrical Supervisor, a Mechanical Supervisor, an I&C Supervisor, and an RP Supervisor should be staffed within 90-minutes of an SAE ECL, or greater, and is typically staffed in the OSC. The OSC Supervisor can effectively manage the maintenance resources for the additional 30-minutes prior to the specific craft (mechanical, electrical, or I&C) respond, as demonstrated through drills and exercises, without compromising the staff's reasonable assurance finding in accordance with 10 CFR 50.47(a).

#### **FIN Supervisor**

Moving the FIN Supervisor from 60 minutes (current emergency plan) to 90 minutes (proposed emergency plan) conforms to NUREG-0654 R2.

## Lead OSC Supervisor

Operations staff are currently trained with basic troubleshooting skills for support of all EOP and abnormal response procedure actions. Supervision of these actions are performed by the Shift Manager and Unit Supervisors regardless of augmented ERO staffing. There is no need for the ERO to relieve the shift of this responsibility.

The Flex/B.5.b process and equipment, and the operating emergency procedures (EOP, AOP, etc.), are designed to be implemented by the minimum on-shift staff. Through technological and process enhancements, the on-shift staff can cope with an event (Design Basis and Beyond Design Basis) initially without an ERO as analyzed in detail for other non-EP regulatory requirements. With FLEX/B.5.b processes and equipment codified by 10 CFR 50.155 into plant response procedures, on-shift personnel have the capability for mitigating core damage from design or beyond design basis events.

Based on this, OSC personnel are used primarily for repair activities, with operations personnel focusing on mitigating activities per the EOPs and other event procedures.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan for the Lead OSC Supervisor does not impact the capability or timeliness to perform the Supervision of Repair Team Activities function.

On Shift impact of change from 60 to 90 minutes: In NUREG 0654 revision 2 table B1, the Lead OSC Supervisor during the first 30 minutes of response is dedicated to identifying any craft maintenance needs and deploying them as required to get started on repair team needs. After that time, the Craft Supervision comes in to take over the planning of repair tasks.

As described above the OSC supervision is not necessary for the initial response, the on-shift staff have the capability of performing emergency maintenance functions — overriding Air operated/ motor operated valves due to recalcitrant valve actions, breaker opening/ closing, breaker resets, and taking channels out of service that are causing protection systems to function abnormally. These tasks are part of the standard operations function and are trained/ drilled regularly through continuing training programs. The shift manager is overall in charge of operations response as stated throughout this document and this function is no different. Most of these functions are procedurally directed or can be deduced from training/ experience and directed by the control room for response. Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no staffing requirements for particular skillsets to be present in this position. As such, there are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

#### 2.2.11 [Potential RIE 2-11] OSC Craft at 90 minutes

The proposed emergency plan adds 30/60 minutes to the augmentation response time of OSC craft minimum staff ERO positions that perform the Repair Team Activities function.

This change deviates from the current emergency plan 30 and 60-minute ERO response time requirements and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

... a minimum number of maintenance personnel should respond to an event as part of the ERO, with more personnel available on an as-needed basis depending on the event. The augmentation (support) of the electrician and mechanic positions should occur within 60-minutes of an Alert ECL, (or greater), and is typically staffed in the OSC. The augmentation (support) of the I&C position should occur within 90-minutes of an Alert ECL, or greater, and is typically staffed in the OSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Table B-1 of NUREG-0654 calls for the addition of one "Mechanical Maintenance," one "Rad Waste Operator," and an added "Electrical Maintenance" person within 60 minutes. To adequately support an extension of the response time for these responders, the licensee should demonstrate that the responsibilities of these positions can be covered with on-shift staff or earlier responders.

Operations Emergency Operating Procedures have been developed to provide direction for a wide range of events described in the FSAR that uses operators to place the plant in a safe and stable condition. Maintenance personnel are not called upon in the response stage of an event as repair activities are taken after immediate EOP response actions.

Through equipment, process, and training enhancements the on-shift staff can initially respond to Design Basis and Beyond Design Basis (BDB) events without the support of an augmented ERO. As codified by 10 CFR 50.155, NextEra FLEX equipment provides the on-shift staff with additional resources when installed plant equipment is lost or damaged. Generally, FLEX provides portable backup equipment onsite that can be used to supplement or replace installed plant equipment in maintaining long-term core cooling, spent fuel cooling, and containment integrity. Movement of FLEX equipment, including

installation into plant systems and its operations (electrical, fluid, etc.) is performed by on-shift personnel.

Due to the availability of FLEX equipment, NextEra stations have diverse protection against loss of ECCS capability and other systems, which provides a basis for determination that no immediate ECCS repair and corrective actions are likely necessary for on-shift personnel prior to augmentation of maintenance personnel. The FLEX/BDB process and equipment, and the operating emergency procedures (EOP, AOP, etc.) are designed to be implemented with the minimum shift staff. By accounting for FLEX equipment and strategies that eliminate or prolong the need for equipment and systems repair the maintenance challenges are simplified and the need for a 60 minute craft personnel response is diminished.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

On Shift impact of change from 60 to 90 minutes: In NUREG 0654 revision 2 table B1, the craft function during the first 30 minutes of response is dedicated to identifying any craft maintenance needs and reporting that information to the Lead OSC Supervisor to develop priorities on repair team needs. After that time, the Craft Supervision comes in to take over the planning of repair tasks.

Shift operations staff have the capability of performing emergency maintenance functions – overriding Air operated/ motor operated valves due to recalcitrant valve actions, breaker opening/ closing, breaker resets, and taking channels out of service that are causing protection systems to function abnormally. These tasks are part of the standard operations function and are trained/ drilled regularly through continuing training programs. The shift manager is overall in charge of operations response as stated throughout this document and this function is no different. Most of these functions are procedurally directed or can be deduced from training/ experience and directed by the control room for response.

While the early identification of repair team needs will not be directly addressed by the field operations staff, the ability of the shift to perform emergency maintenance functions will identify which pieces of equipment are truly unavailable which will be reported to the Shift Manager and to the ERO through the SM/SED turnover process. Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

While there are skills in the OSC Mechanic and OSC Electrician that are not 100% present in shift staff – the skills required for the 60 to 90 minute gap are available on shift to perform emergency maintenance functions and identify equipment that is out of service.

#### 2.2.12 [Potential RIE 2-12] Security Liaison at 90 minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the Security Liaison minimum staff ERO position that perform the Security function.

This change deviates from the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The licensee's Security Force is controlled and maintained by the licensee's NRC-approved physical security plan and does not need to be reflected in the Emergency Plan. However, the establishment of a Security Liaison position in the TSC is advantageous to ensure effective coordination between the security force and the ERO, particularly for events where offsite resources are necessary as well as for security related events and site personnel accountability. The augmentation (support) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed by a Security Liaison in the TSC to coordinate security-related activities with that of the ERO.

The site-specific Physical Security Plan (PSP) defines on-shift security staffing. This PSP staffing supports initial event response, either security or emergency plan related. The Security Shift Supervisor communicates directly with the Shift Manager informing them of security related actions and conditions. This communication does not change with the augmentation of the ERO.

Following the transfer of command and control, the Security Liaison position coordinates security and emergency related communications and response actions between the Site Emergency Director and the security force. The Security Liaison position provides communication and coordination resources that are not needed until the TSC and OSC are augmented at the 90 minute point in time.

On Shift impact of change from 60 to 90 minutes: As stated above, the PSP defines the on-shift security staff to support the initial response and the Security Liaison is not necessary until the TSC/OSC are staffed. Therefore by aligning the Security Liaison's response time to the TSC/OSC, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by security shift staff in adjusting the response from 60 to 90 minutes.

#### 3.0 ERO KEY FUNCTION ANALYSIS

Each sub-section below lists the NUREG-0654 R2 Table B-1 tasks associated with the key function; and then provides, as applicable, a staffing comparison table, Emergency Plan Change Assessment section and NUREG-0654 R2 Alignment Assessment section for the on-shift and minimum staff ERO positions.

- The Emergency Plan Change Assessment section evaluates any difference in ERO staffing between the current emergency plan and the proposed emergency plan for the key function. It includes the basis for the original and proposed staffing and justification for the change as applicable. The ERO Task Analysis provides further detail and disposition of the tasks assigned to the ERO positions.
- The NUREG-0654 R2 Alignment Assessment section evaluates any difference in ERO staffing between NUREG-0654 R2 and the proposed emergency plan for the particular key function to determine conformance. It also states whether the tasks assigned to the ERO position are aligned with the tasks specified for the key function in NUREG-0654 R2.

### 3.1 Key Function: Command and Control

The Command and Control function includes the following NUREG-0654 R2 Table B-1 tasks:

- Provide overall ERO command and control.
- Approve emergency classification levels (ECL) and/or protective action recommendations (PAR).
- Authorize personnel dose extensions.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

### 3.1.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Shift Manager	(1) Shift Manager	(1) Operations Shift Manager

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The proposed emergency plan provides one (1) Shift Manager to perform the command and control function as the Emergency Director until relieved.

No functional changes have been made to the minimum staff ERO positions for the Command and Control function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Operations Shift Manager to the on-shift Command and Control function.

The proposed emergency plan assigns one (1) Shift Manager to the on-shift Command and Control function.

The proposed emergency plan on-shift ERO staffing level meets the NUREG-0654 R2 guidance for the Command and Control function. The major tasks are aligned with those stated in NUREG-0654 R2 guidance.

#### 3.1.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Emergency Coordinator	(1) Site Emergency Director	(1) Emergency Coordinator
	(TSC)	(TSC at Alert or higher)
(1) Recovery Manager	None	(1) Emergency Director (EOF
		at SAE or higher)

### 1. Emergency Plan Change Assessment

The current emergency plan assigns the Emergency Coordinator in the TSC to initially assume Command and Control from the Shift Manager and the Recovery Manager in the EOF to assume Command and Control function once the EOF is staffed and activated.

The proposed emergency plan assigns one (1) Site Emergency Director minimum staff ERO position at the Alert emergency classification level to the Command and Control function.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one TSC Emergency Coordinator minimum staff ERO position at the Alert emergency classification level and one EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level for the Command and Control function.

The proposed emergency plan provides one Site Emergency Director minimum staff ERO position at the Alert emergency classification level for the Command and Control function.

[Potential RIE 1-1] The proposed emergency plan does not assign an EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level for the Command and Control function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Command and Control function from two (2) to one (1).

This change deviates from the current emergency plan requirements and NUREG-0654 R2 minimum staff ERO guidance.

#### 3.2 Key Function: Emergency Classifications

The Emergency Classifications function includes the following NUREG-0654 R2 Table B-1 task:

Evaluate plant conditions and recommend emergency classifications.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

#### 3.2.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
STA or Unit Supervisor	(1) Shift Classification	(1) Emergency Classification
	Advisor(a)	Advisor**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

### 1. Emergency Plan Change Assessment

The current emergency plan assigns the STA or a Unit Supervisor as on-shift ERO positions with the collateral responsibility to the Emergency Classifications function.

The proposed emergency plan provides a Classification Advisor on-shift ERO position as a collateral responsibility to the Emergency Classifications function. STAs or any SRO may be qualified to perform this function.

All SROs are equally trained and qualified with regard to emergency classification (Guide #:0901003 LO Qualification Guide R8, Attachment C: Record of OJT/TPE Performance C3 – Direct RO/SRO Tasks, Task L52 ID 02-200-010-501 Perform Emergency Coordinator Responsibilities). In the current emergency plan, the Classification Advisor can be performed by the STA, if separate from the SM, or an available SRO (such as a Unit Supervisor), as needed. In the proposed emergency plan the Classification Advisor can be performed by any available SRO (such as a Unit Supervisor), as needed.

No functional changes have been made to the Classification Advisor on-shift ERO position for the Emergency Classifications function.

#### 2. NUREG-0654 R2 Alignment Assessment

The proposed emergency plan identifies the on-shift Classification Advisor as the position responsible for the Emergency Classifications function, which can be assigned as a collateral function and meets NUREG-0654 R2 guidance. The major task is aligned with that stated in NUREG-0654 R2 guidance.

#### 3.2.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) TSC Operations Coordinator	(1) Classification Advisor TSC	(1) TSC Emergency Classification Advisor

### 1. Emergency Plan Change Assessment

The current emergency plan assigns an Operations Coordinator minimum staff ERO position as a collateral responsibility for the Emergency Classification function.

The proposed emergency plan provides one (1) Classification Advisor TSC minimum staff ERO position for the Emergency Classifications function.

No functional changes have been made to the Classification Advisor minimum staff ERO position for the Emergency Classification function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) TSC Emergency Classification Advisor minimum staff ERO position for the Emergency Classifications function.

The proposed emergency plan provides one (1) TSC Classification Advisor minimum staff ERO position for the Emergency Classifications function.

The proposed emergency plan TSC Classification Advisor minimum staff ERO position meets the NUREG-0654 R2 guidance for the Emergency Classifications function. The major task is aligned with that stated in NUREG-0654 R2 guidance.

#### 3.3 Key Function: Communications

The Communications function includes the following NUREG-0654 R2 Table B-1 task:

• Communicate ECLs and PARs to OROs, including the NRC.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

### 3.3.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Communicator(a)	(1) Shift Communicator(a)	(1) Communicator**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns one individual to serve as a shift Communicator. During emergency situations, this individual reports to the SM and performs communication and notification functions as assigned. The Communicator will keep an open line of communication with the NRC, as requested, and should not have any other event response duties that interfere with the communicator function once this open line is established. This position may be filled by a qualified OS, AO, or STA as a collateral duty.

The proposed emergency plan assigns a Shift Communicator (typically the Shift Manager position) to fill the Communications function as a collateral duty.

No functional changes have been made to the on-shift ERO positions for the Communications function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns an on-shift position to the Communications function as a collateral duty.

The proposed emergency plan assigns a qualified on-shift operations position to the Communications function as a collateral duty.

The proposed emergency plan Communicator on-shift ERO collateral duty meets the NUREG-0654 R2 guidance for the Communications function. The major task is aligned with that stated in NUREG-0654 R2 guidance.

### 3.3.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) TSC Communicator	(1) ORO Communicator (TSC)	(1) ORO Communicator (TSC
		at Alert or higher)
(1) EOF Communicator	None	(1) ORO Communicator (EOF
		at SAE or higher)
(1) TSC ENS Communicator	(1) ENS Communicator (TSC)	(1) NRC Communicator (TSC
		at Alert or higher)
EOF Communicator above	(1) Site Dose Assessor	As needed (one communicator
also responsible for HPN		staffed at TSC for NRC
		communications if needed)

#### 1. Emergency Plan Change Assessment

#### A. Offsite Communicator

The current emergency plan assigns one (1) TSC Communicator and one EOF Communicator minimum staff ERO position for the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator minimum staff ERO position at the Alert emergency classification level to the Communications function.

#### B. NRC Notifications

The current emergency plan assigns one (1) TSC NRC Communicator and one EOF Communicator minimum staff ERO positions for the Communications function.

The proposed emergency plan assigns one (1) TSC ENS Communicator as a minimum staff ERO position at the Alert emergency classification level for the Communications function.

#### 2. NUREG-0654 R2 Alignment Assessment

#### A. ORO Notifications (State/County)

NUREG-0654 R2 assigns one (1) TSC ORO Communicator minimum staff ERO position at the Alert emergency classification level and one (1) EOF ORO Communicator minimum staff ERO position at the Site Area Emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator minimum staff ERO position at the Alert emergency classification level to the Communications function.

#### B. NRC Notifications

NUREG-0654 R2 assigns one (1) TSC NRC Communicator minimum staff ERO position to the ENS aspect of the Communications function.

The proposed emergency plan assigns one (1) TSC ENS Communicator minimum staff ERO position to the ENS aspect of the Communications function.

The proposed emergency plan TSC ENS Communicator minimum staff ERO position meets the NUREG-0654 R2 guidance for the ENS aspect of the Communications function.

**Potential RIE 1-2]** The proposed emergency plan does not provide an EOF ORO Communicator minimum staff ERO position at the Site Area Emergency classification level for the Communications function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the ORO aspect of the Communications function from two (2) to one (1).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

#### 3.4 Key Function: Supervision of RP Staff and Site Radiation Protection

The Supervision of Radiation Protection Staff and Site Radiation Protection function includes the following NUREG-0654 R2 Table B-1 tasks:

- Evaluate and assess plant and offsite radiological data in the development of onsite protective actions and offsite PARs.
- Recommend onsite protective actions and offsite PARs to the applicable decisionmaker.
- Direct all radiation protection activities, including Field Monitoring Team (FMT) direction.
- Provide relevant information to applicable communicators who are communicating offsite PARs to OROs.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

#### 3.4.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	(1) Shift Manager(a)	(1) Operations Shift
		Manager**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

### 1. Emergency Plan Change Assessment

The current emergency plan does not assign an on-shift ERO collateral duty for the Supervision of RP Staff and Site Radiation Protection function.

The proposed emergency plan assigns the Shift Manager on-shift ERO collateral duty to the Supervision of RP Staff and Site Radiation Protection function.

No functional changes have been made to the on-shift ERO position for the Supervision of Radiation Protection Staff and Site Radiation Protection function. Although not specifically stated in the current emergency plan, the Shift Manager has overall supervision/management of all on-shift positions.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns the Supervision of Radiation Protection Staff and Site Radiation Protection function to the Shift Manager as a collateral duty.

The proposed emergency plan assigns the Supervision of Radiation Protection Staff and Site Radiation Protection function to the Shift Manager as a collateral duty.

The proposed emergency plan meets the NUREG-0654 R2 guidance for assigning the Shift Manager position to the Supervision of Radiation Protection Staff and Site Radiation Protection function. The major tasks are aligned with that stated in NUREG-0654 R2 guidance.

#### 3.4.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) TSC RP Supervisor	(1) TSC RP Coordinator	(1) TSC Site Radiation
	(TSC)	Protection Coordinator
		(TSC at Alert or higher)
	(1) EOF RP Coordinator	(1) EOF Radiation Protection
	(EOF)	Manager (EOF at SAE or
		higher)

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC RP Supervisor minimum staff ERO position to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one (1) TSC RP Coordinator and one (1) EOF RP Coordinator minimum staff ERO positions to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

EOF RP Coordinator minimum staff ERO position has been added to better align with the guidance in NUREG-0654 R2 for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 guidance assigns one (1) TSC RP Coordinator minimum staff ERO position and one (1) EOF RP Manager minimum staff ERO position for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one (1) TSC RP Coordinator and one (1) EOF RP Coordinator minimum staff ERO positions to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan TSC RP Coordinator and the EOF RP Coordinator minimum staff ERO positions meet NUREG-0654 R2 guidance for the Supervision of Radiation Protection Staff and Site Radiation Protection function. The major tasks are aligned with those stated in NUREG-0654 R2 guidance.

#### 3.5 Key Function: Dose Assessments / Projections

The Dose Assessments / Projections function includes the following NUREG-0654 R2 Table B-1 task:

 Perform Dose Assessments / Projections and provide input to applicable PAR decision-maker.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

### 3.5.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
	(1) Shift Dose Assessor(a)	(1) Dose Assessment /
		Projections Staff**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign a Dose Assessor on-shift ERO collateral duty for the Dose Assessments / Projections function, although the on-shift Chemistry Technician is assigned the responsibility by procedure.

The proposed emergency plan assigns a Dose Assessor on-shift ERO collateral duty for the Dose Assessments / Projections function, which can be performed by any qualified on-shift individual (typically, the RPQI positions are task-qualified to perform dose assessment).

Assignment of the Dose Assessment function as a collateral duty to different on-shift personnel is functionally equivalent.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 guidance assigns the on-shift Dose Assessor ERO position as a collateral duty for the Dose Assessments / Projections function.

The proposed emergency plan assigns the on-shift Dose Assessor ERO position as a collateral duty for the Dose Assessments / Projections function.

The proposed emergency plan assignment of the on-shift Dose Assessor ERO position as a collateral duty and meets NUREG-0654 R2 guidance for the on-shift Dose Assessments / Projections function. The major task is aligned with that stated in NUREG-0654 R2 guidance.

# 3.5.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) TSC Dose Assessor	(1) Remote Dose Assessor	(1) Dose Assessment/
	(Remote)	Projection Staff (TSC at
		Alert or higher)
(1) EOF Dose Assessor/FMT	(1) EOF Dose Assessor	(1) Dose Assessment/
Coord.		Projection Staff (EOF at
		SAE or higher)

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC Dose Assessor and one (1) EOF Dose Assessment/FMT Coordinator minimum staff ERO positions to the Dose Assessments / Projections function.

The proposed emergency plan assigns one (1) EOF Dose Assessor and one (1) Remote Dose Assessor as minimum staff ERO positions for the Dose Assessments

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one Dose Projection Staff at the TSC and one Dose Projection Staff at the EOF as minimum staff ERO position for the Dose Assessments / Projections function. The term "Staff" would refer to sufficient personnel to perform the function. With the use of current computer based programs to collect, display and calculate radiological data the function can be performed by one individual.

The proposed emergency plan assigns one EOF Dose Assessor and one (1) Remote Dose Assessor as minimum staff ERO positions for the Dose Assessments / Projections function.

The proposed emergency plan is consistent with the current emergency plan regarding the Dose Assessments / Projections function.

# 3.6 Key Function: Radiation Protection

The Radiation Protection function includes the following NUREG-0654 R2 Table B-1 tasks:

- Provide qualified radiation protection coverage for responders accessing potentially unknown radiological environments during emergency conditions.
- Provide in-plant surveys.
- Control dosimetry and radiologically controlled area access.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

# 3.6.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(2) HP Technician	<ul><li>(1) RP Technician</li><li>(1) RP Qualified Individual</li></ul>	(2) Radiation Protection Personnel
(1) Rad/Chem Technician	None	None

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns two (2) on-shift Health Physics Technician and one (1) on-shift Rad/Chem Technician on-shift ERO positions to the Radiological Assessment function to the Radiological Protection function.

The proposed emergency plan assigns one (1) RP Technician and one (1) RP qualified Individual on-shift to perform the Radiation Protection function.

The RP Qualified Individual will be trained to perform in-plant radiological surveys/samples, issue dosimetry and provide radiation protection coverage for responders. The current emergency plan does not identify the qualification requirements of the 2 Radiation Protection Technologist.

The proposed emergency plan is consistent with the current emergency plan regarding the Radiation Protection function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns two (2) on-shift Radiation Protection Personnel to the Radiological Protection function.

The proposed emergency plan assigns one (1) RPT and one (1) RP Qualified Individual on-shift ERO positions to the Radiation Protection function.

The proposed emergency plan on-shift RPT and RP Qualified Individual meet the NUREG-0654 R2 guidance for the Radiation Protection function.

[Potential RIE 1-3] The proposed emergency plan reduces the number of on-shift ERO positions for the Radiation Protection function. Specifically, this change reduces the overall number of radiation protection personnel on-shift ERO positions used for the Radiation Protection function from three (3) in the current emergency plan to two (2) in the proposed emergency plan.

This change deviates from the current emergency plan on-shift staff ERO position requirements.

[Potential RIE 1-4] The proposed emergency plan allows collateral duty assignments to be given to radiation protection personnel when performing the Radiation Protection function. Specifically, this change allows radiation protection personnel to perform the Dose Assessment /Projections function and support other on-shift actions when not assigned a response activity.

This change deviates from the NUREG-0654 R2 on-shift staff ERO position guidance.

# 3.6.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(6) PD Toohnisian	(3) RP Technician	(6) Radiation Protection
(6) RP Technician	(2) RP Qualified Individual	Personnel

# 1. Emergency Plan Change Assessment

The current emergency plan provides six (6) RP Technicians as the minimum staff ERO to the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals as the minimum staff ERO assigned to the Radiation Protection function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides six (6) RP Technicians as the minimum staff ERO assigned to the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals as the minimum staff ERO assigned to the Radiation Protection function.

[Potential RIE 1-5] The proposed emergency plan reduces the number and qualifications of minimum staff ERO positions for the Radiation Protection function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Radiation Protection function from six (6) in the current emergency plan and in NUREG-0654, to five (5) in the proposed emergency plan, consisting of three (3) RPTs and two (2) RP Qualified individuals that are task trained but not required to be ANSI equivalent RPTs.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

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# 3.7 Key Function: Field Monitoring Teams (FMTs)

The Field Monitoring Teams function includes the following task:

• Provide onsite (out of plant) and offsite surveys.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

# 3.7.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	Not applicable

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that no maintenance personnel were called upon to perform an activity from the emergency procedures or assigned an activity from non-emergency procedures that impacted the ability of another on-shift ERO member to perform their function.

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign the Field Monitoring Teams function to an on-shift position.

The proposed emergency plan does not assign the Field Monitoring Teams function to an on-shift position.

The NUREG-0654 R2 technical basis for the ERO guidance states that:

Revision 1 of NUREG-0654/FEMA-REP-1 did not describe why maintenance personnel were expected to be on-shift. This has led to issues related to consistency in interpretation and the expected qualification of these personnel, primarily on-shift. The NRC has determined that, from an EP perspective, the ability to get emergency core cooling system (ECCS) equipment operational was the primary basis for necessitating maintenance expertise while on-shift. Maintenance staff expertise may be advantageous for licensees to consider for other reasons, and at their discretion; however, for the purposes of NUREG-0654/FEMA-REP-1, the only area where maintenance availability should typically be necessary on-shift is for ECCS issues. However, a licensee's ECCS is designed to be redundant and diverse such that common mode failures are very unlikely. As a result, the need to accommodate maintenance functionality on-shift is unnecessary.

Maintenance personnel are not required for the operation of the ECCS or other safety related systems. Minor repairs (such as reset breakers, replace fuses, lubricate equipment, install spool piece, etc.) are performed by on-shift operations personnel qualified to perform the actions as part of normal, abnormal and emergency operating procedure activities. Major repair activities are not necessary to support the emergency operations procedures which ensure the plant can be placed in a safe shutdown condition.

Use of maintenance personnel for beyond design basis tasks, such as FLEX and/or SAMG activities, is documented and controlled outside the scope of the emergency preparedness program and are governed under other applicable regulations and quidance.

Use of maintenance personnel for fire brigade or rescue activities are outside the scope of the emergency preparedness program and are governed under other applicable requirements, such as the site fire protection plan and technical specifications for that function.

Maintenance personnel are not trained or used to performing EP functions (such as offsite communications). Emergency Plan Implementing Procedures (EPIPs) do not assign any on-shift response actions to maintenance personnel.

No functional changes have been made to the on-shift staff ERO positions for the Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 does not assign the Field Monitoring Teams (FMTs) function to an on-shift position.

The proposed emergency plan does not assign the Field Monitoring Teams (FMTs) function to an on-shift position.

The proposed emergency plan is consistent with NUREG-0654 R2 guidance regarding the Field Monitoring Team function for the on-shift ERO.

# 3.7.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
		(1) Onsite FMT Qualified
(2) RP Technician	None	individual
		(1) Onsite FMT Driver
	(2) FM Technician	(2) Offsite FMT Qualified
(4) RP Technician		individual
	(2) FM Driver	(2) Offsite FMT Driver

# 1. Emergency Plan Change Assessment

# A. Onsite Field Monitoring

The current emergency plan assigns two (2) RP Technicians minimum staff ERO positions to the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

# B. Offsite Field Monitoring

The current emergency plan assigns four (4) RP Technicians as minimum staff ERO to the offsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan assigns two FM Technicians and two FM Drivers for minimum staff ERO positions for the Field Monitoring Teams function

No functional change has been made to the four (4) Field Monitoring Team minimum staff ERO positions for the offsite field monitoring aspect of the Field Monitoring Teams function.

[Potential RIE 1-6] The proposed emergency plan does not staff the onsite field monitoring minimum staff ERO position for the Field Monitoring Teams function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the onsite field monitoring aspect of the Field Monitoring Teams function from two (2) to zero (0).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

# 2. NUREG-0654 R2 Alignment Assessment

# A. Onsite Field Monitoring

NUREG-0654 R2 assigns one (1) onsite Field Monitoring Team Technician as minimum staff ERO to the onsite field monitoring aspect of the Field Monitoring Teams function.

NUREG-0654 R2 provides one (1) onsite Field Monitoring Team Driver as minimum staff ERO to the onsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

# B. Offsite Field Monitoring

NUREG-0654 R2 assigns two (2) offsite Field Monitoring Team Technicians and two (2) Field Monitoring Team Drivers minimum staff ERO members for the offsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan assigns two (2) offsite Field Monitoring Team Technicians and two (2) Field Monitoring Team Drivers minimum ERO members for the offsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan minimum staff ERO offsite Field Monitoring Team position staffing level meets the NUREG-0654 R2 guidance for the Radiation Protection function. The major tasks are aligned with those stated in NUREG-0654 R2 guidance.

# 3.8 Key Function: Engineering

The Engineering function includes the following NUREG-0654 R2 Table B-1 tasks:

- Provide engineering coverage related to the specific discipline of the assigned engineer.
- Monitor and evaluate plant and event conditions.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

# 3.8.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Shift Technical Advisor	(1) Shift Technical Advisor(a)	(1) Core/Thermal Hydraulics Engineer**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns the Engineering function to the Shift Manager/STED (or SRO qualified to stand shift as STA) as a collateral responsibility.

The proposed emergency plan assigns the Engineering function to the Shift Technical Advisor as a collateral responsibility.

The requirement for staffing the Shift Technical Advisor position is established by the station's Tech Specs.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it continues to be performed when needed without overlap and overburden from competing tasks.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns the Engineering function to a Core/Thermal Hydraulics Engineer as a collateral responsibility.

The proposed emergency plan assigns the Engineering function to the Shift Technical Advisor as a collateral duty.

The proposed emergency plan Shift Technical Advisor ERO position meets the NUREG-0654 R2 guidance for the on-shift Engineering collateral duty function. The major tasks are aligned with those stated in NUREG-0654 R2 guidance.

# 3.8.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) TSC Reactor Engineer	(1) Reactor Engineer	(1) Core/Thermal Hydraulics
	(Remote)	
(1) Electrical REP PST (TSC)	(1) Electrical/I&C Engineer	(1) Electrical / Instrumentation
	(Remote)	and Control (I&C)
(1) Mechanical REP PST	(1) Mechanical Engineer	(1) Mechanical
(TSC)	(Remote)	

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as minimum staff ERO positions to the Engineering function.

The current emergency plan assigns one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as minimum staff ERO positions to the Engineering function.

The engineers will operate remotely, reporting to the sites TSC.

No functional change has been made to the three (3) Engineer minimum staff ERO positions for the Engineering function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one Nuclear Engineer, one Electrical Engineer, and one Mechanical Engineer as minimum staff ERO positions for the Engineering function.

The proposed emergency plan assigns one (1) Reactor Engineer, one (1) Electrical Engineer, one (1) Mechanical Engineer, as minimum staff ERO positions for the Engineering function.

The proposed emergency plan minimum staff ERO positions align with the NUREG-0654 R2 guidance for the OnShift Engineering function.

# 3.9 Key Function: Supervision of Repair Team Activities

The Supervision of Repair Team Activities function includes the following task:

• Direct in-plant event response and repair activities.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

# 3.9.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
	None	Not applicable

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign an on-shift position to the Supervision of Repair Team Activities function.

The proposed emergency plan does not assign an on-shift position to the Supervision of Repair Team Activities function.

No functional changes have been made to the on-shift staff ERO positions for the Supervision of Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 does not assign an on-shift position to the Supervision of Repair Team Activities function.

The proposed emergency plan does not assign an on-shift position to the Supervision of Repair Team Activities function.

The proposed emergency plan is consistent with NUREG-0654 R2 guidance regarding the Supervision of Repair Team Activities function for the on-shift ERO.

# 3.9.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) OSC Manager	(1) Lead OSC Supervisor	(1) OSC Supervisor
(1) OSC Supervisor		(1) Electrical Supervisor
	(1) FIN Supervisor	(1) Mechanical Supervisor
		(1) I&C Supervisor
(1) RP Supervisor	None	(1) RP Supervisor

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) OSC Manager, one (1) OSC Supervisor, and one (1) RP Supervisor as minimum staff ERO members to the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) FIN Supervisor as minimum staff ERO members to the Supervision of Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) OSC Supervisor, one (1) Electrical Supervisor, one (1) Mechanical Supervisor, one (1) I&C Supervisor, and one (1) RP Supervisor as minimum staff ERO members to the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) FIN Supervisor as minimum staff ERO members to the Supervision of Repair Team Activities function.

**[Potential RIE 1-7]** The proposed emergency plan does not include an OSC RP Supervisor minimum staff ERO position to the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan requirements and NUREG-0654 R2 minimum staff ERO guidance for the Supervision of Repair Team Activities function.

[Potential RIE 1-8] The proposed emergency plan does not assign OSC maintenance supervisors for each craft. Specifically, this change reduces the number of OSC craft supervisor minimum staff ERO positions used for the Supervision of Repair Team Activities function from three (3) to one (1).

This change deviates from the NUREG-0654 R2 minimum staff ERO guidance.

# 3.10 Key Function: Repair Team Activities

The Repair Team Activities function does not specify a major task in NUREG-0654 R2 Table B-1.

# 3.10.1 <u>On-Shift ER</u>O

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	Not applicable

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that no maintenance personnel were called upon to perform an activity from the emergency procedures or assigned an activity from non-emergency procedures that impacted the ability of another on-shift ERO member to perform their function.

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign on-shift positions to the Repair Team Activities function.

The proposed emergency plan does not assign on-shift positions to the Repair Team Activities function

The NUREG-0654 R2 technical basis for the ERO guidance states that:

Revision 1 of NUREG-0654/FEMA-REP-1 did not describe why maintenance personnel were expected to be on-shift. This has led to issues related to consistency in interpretation and the expected qualification of these personnel, primarily on-shift. The NRC has determined that, from an EP perspective, the ability to get emergency core cooling system (ECCS) equipment operational was the primary basis for necessitating maintenance expertise while on-shift. Maintenance staff expertise may be advantageous for licensees to consider for other reasons, and at their discretion; however, for the purposes of NUREG-0654/FEMA-REP-1, the only area where maintenance availability should typically be necessary on-shift is for ECCS issues. However, a licensee's ECCS is designed to be redundant and diverse such that common mode failures are very unlikely. As a result, the need to accommodate maintenance functionality on-shift is unnecessary.

Maintenance personnel are not required for the operation of the ECCS or other safety related systems. Minor repairs (such as reset breakers, replace fuses, lubricate equipment, install spool piece, etc.) are performed by on-shift operations personnel qualified to perform the actions as part of normal, abnormal and emergency operating procedure activities. Major repair activities are not necessary to support the emergency operations procedures which ensure the plant can be placed in a safe shutdown condition.

Use of maintenance personnel for beyond design basis tasks, such as FLEX and/or SAMG activities, is documented and controlled outside the scope of the emergency preparedness program and are governed under other applicable regulations and guidance.

Use of maintenance personnel for fire brigade or rescue activities are outside the scope of the emergency preparedness program and are governed under other

applicable requirements, such as the site fire protection plan and technical specifications for that function.

Maintenance personnel are not trained or used to performing EP functions (such as offsite communications). Emergency Plan Implementing Procedures (EPIPs) do not assign any on-shift response actions to maintenance personnel.

No functional changes have been made to the on-shift staff ERO positions for the Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 does not assign the Repair Team Activities function to an on-shift position.

The proposed emergency plan does not assign the Repair Team Activities function to an on-shift position.

The proposed emergency plan meets NUREG-0654 R2 guidance regarding the Repair Team Activities function for the on-shift ERO.

# 3.10.2 Minimum staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(2) Electricians	(1) Electrician	(1) Electrician
(2) Mechanics	(1) Mechanic	(1) Mechanic
(1) I&C Technician	(1) I&C Technician	(1) I&C Technician
None	None	Additional Electrician as
		needed
		Additional Mechanic as
		needed
		Additional I&C staff if needed

# 1. Emergency Plan Change Assessment

The current emergency plan assigns two (2) Electricians, two (2) Mechanics, and one (1) I&C Technician minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician minimum staff ERO positions to the Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan minimum staff ERO maintenance positions meet NUREG-0654 R2 guidance for the Repair Team Activities function.

**[Potential RIE 1-9]** The proposed emergency plan reduces the number of Electricians from two (2) to (1) and the number of Mechanics from (2) to one (1) for the Repair Team Activities function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Repair Team Activities function from five (5) to three (3).

This change deviates from the current emergency plan minimum staff ERO position requirements.

# 3.11 Key Function: Security

The Security function includes the following task:

 Coordinate security related activities and information with the Emergency Coordinator.

# 3.11.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Security Shift Supervisor	(1) Security Shift Supervisor	Security staffing per the site-
Security staff(b)	Security staff(b)	specific security plan.

(b) Per the site Security Plan.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) on-shift Security Shift Supervisor ERO position to the Security function.

The proposed emergency plan assigns one (1) on-shift Security Shift Supervisor ERO position to the Security function.

No functional changes have been made to the on-shift staff ERO positions for the Security function.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it continues to be performed when needed without overlap and overburden from competing tasks.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 specifies on-shift security staffing is per the site-specific security plan for the Security function.

The proposed emergency plan assigns one (1) on-shift Security Shift Supervisor ERO position to the Security function.

The NUREG-0654 R2 technical basis for the ERO guidance states that:

viii This note emphasizes that on-shift operations staff, security staff, and fire brigade staff (as applicable) are controlled by other non-EP processes. It is only when EP functions are assigned to on-shift staff that the requirements of 10 CFR Part 50, Appendix E, Section IV.A.9 apply, thus requiring an on-shift staffing analysis be performed.

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This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that the Security Shift Supervisor performs EP and security related activities without overlap and overburden from competing tasks.

The proposed emergency plan assigns the on-shift Security Shift Supervisor to the Security function, which meets the NUREG-0654 R2 guidance for on-shift operations staff, security staff, and fire brigade staff who are assigned ERO tasks.

# 3.11.2 Minimum staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	(1) Security Liaison (TSC)	(1) Security Liaison (TSC)

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Security Supervisor minimum staff ERO position to the Security function.

The proposed emergency plan assigns one (1) Security Liaison minimum staff ERO position to the Security function.

No functional changes have been made to the minimum staff ERO positions for the Security function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Security Liaison minimum staff ERO position for the Security function.

The proposed emergency plan assigns one (1) Security Liaison minimum staff ERO position to the Security function.

The proposed emergency plan Security Liaison minimum staff ERO position meets the NUREG-0654 R2 guidance for the Security function. The major task is aligned with that stated in NUREG-0654 R2 guidance.

# 3.12 Key Function: Media Information

The Media Information function includes the following NUREG-0654 R2 Table B-1 task:

Manage and coordinate media information related to the event

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

# 3.12.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	Not applicable

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign an on-shift position to the Media Information function.

The proposed emergency plan does not assign an on-shift position to the Media Information function.

No functional changes have been made to the on-shift staff ERO positions for the Media Information function.

# 2. NUREG-0654 R2 Alignment Assessment

The current emergency plan does not assign an on-shift position to the Media Information function.

The proposed emergency plan does not assign an on-shift position to the Media Information function.

The proposed emergency plan meets NUREG-0654 R2 guidance regarding the Media Information function for the on-shift ERO.

# 3.12.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) JIC Manager	(1) Site JIS Manager	JIC/JIS staff to address media
(1) JIC Assistant Manager	(1) Site JIS Coordinator	inquiries at the Alert ECL**
(2) County Tech Advisor	(1) Remote JIS Manager	Staff to perform JIC/JIS related
Nuclear Information Staff*	JIS staff (d)	tasks at SAE ECL or greater

- \* The staff of the FP&L Company Communications Department will be assigned as needed to the corporate Joint Information Center.
- (d) JIS per NextEra Communications Emergency Response Plan. Does not need to be performed in the JIC, but the JIS function needs to be established at this point.
- \*\* Does not need to be performed in the TSC/OSC, but needs to be established at this point.

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign minimum staff ERO positions for the JIC.

NextEra has implemented a Joint Information System (JIS). JIS is a system that integrates incident information and public affairs into a cohesive organization designed to provide consistent, coordinated, timely information during crisis or incident operations. The proposed emergency plan provides the minimum staff ERO JIC/JIS staff positions specified by the NextEra program that controls media and public information.

No functional changes have been made to the minimum staff ERO positions for the Media Information function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 calls for the minimum staff ERO JIC/JIS staff positions needed to address media inquiries at the Alert emergency classification level and to perform JIC/JIS related tasks at Site Area Emergency classification level.

The proposed emergency plan assigns one (1) Site JIS Manager, one (1) Site JIS Coordinator, and one (1) Remote JIS Manager as minimum staff ERO positions to the Media Information function. Non-ERO JIS personnel staffed from Nuclear Marketing/ Communications group with support from corporate group.

The NUREG-0654 R2 technical basis for the ERO guidance states that:

While the exact staffing composition is left to the licensee to determine, with input from applicable OROs, and from the Federal Emergency Management Agency, media relations is an important part of effective emergency response and is consistent with the Joint Information System and Joint Information Center portion of NIMS. As such, the need for media support should be part of the licensee's ERO. The augmentation (support) of this function should, at a minimum, be whatever is absolutely needed to support this function, i.e., without those positions this function could not occur. This should be staffed within 60-min of an Alert ECL, or greater, to address media inquiries; and within 60-minutes of an SAE ECL, or greater, to support media related tasks.

The proposed emergency plan provides a minimum staff complement of three (3) dedicated ERO positions to coordinate with non-ERO corporate communications personnel and perform activities related to the Media Information function.

The NextEra Communications Department operates a Joint Information System (JIS) for day-to-day operations and at all emergency classification levels. The Communications Department responds to media and public inquiries for abnormal conditions and events at any declared emergency classification level. The Communications Department coordinates with site management and ERO personnel, when staffed, to respond to media inquiries. Press releases are issued as appropriate from the Communications Department.

The proposed emergency plan minimum staff ERO positions meet the NUREG-0654 R2 guidance for the Media Information function. The major task is aligned with that stated in NUREG-0654 R2 guidance.

# 3.13 Key Function: Information Technology

The Information Technology function includes the following NUREG-0654 R2 Table B-1 task:

• Ensure IT equipment is operable.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

# 3.13.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2			
None	None	Not Applicable			

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign an on-shift position to the Information Technology function.

The proposed emergency plan does not assign an on-shift position to the Information Technology function.

No functional changes have been made to the on-shift staff ERO positions for the Media Information function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 guidance does not assign an on-shift position to the Information Technology function.

The proposed emergency plan does not assign an on-shift position to the Information Technology function.

The proposed emergency plan meets NUREG-0654 R2 guidance regarding the Information Technology function for the on-shift ERO.

# 3.13.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	(1) TSC IT Lead* (at Alert or higher)
None	None	(1) EOF/JIC/JIS IT Lead* (at SAE or higher)

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign TSC or EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

The proposed emergency plan does not assign TSC or EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

No functional changes have been made to the minimum staff ERO positions for the Information Technology function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) TSC IT Technician and one (1) EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

The proposed emergency plan does not assign TSC or EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

[Potential RIE 1-10] The proposed emergency plan does not assign IT Technicians in the TSC and EOF/JIC. Specifically, this change reduces the number of IT Technicians minimum staff ERO positions used for the Information Technology function from two (2) to zero (0).

This change deviates from the NUREG-0654 R2 minimum staff ERO guidance.

# 4.0 ERO AUGMENTATION ANALYSIS

Each sub-section below provides an augmentation analysis of the impact to the on-shift ERO, regarding relief of key functions, by providing an Emergency Plan Change Assessment section and NUREG-0654 R2 Alignment Assessment section for the minimum staff ERO positions.

- The Emergency Plan Change Assessment section evaluates any difference in ERO augmentation times between the current emergency plan and the proposed emergency plan for the key function. It includes the basis for the original and proposed augmentation and justification for the change as applicable.
- The NUREG-0654 R2 Alignment Assessment section evaluates any difference in ERO augmentation times between NUREG-0654 R2 and the proposed emergency plan for the particular key function to determine conformance.

# 4.1 Key Function: Command and Control

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC Emergency Coordinator 60-minute minimum staff ERO position at the Alert emergency classification level and one (1) EOF Recovery Manager 60-minute minimum staff ERO position at the Site Area Emergency classification level to the Command and Control function.

The proposed emergency plan assigns one (1) Site Emergency Director 90-minute minimum staff ERO position at the Alert emergency classification level to the Command and Control function.

# 2. NUREG-0654 R2 Alignment Assessment

The current emergency plan assigns one (1) TSC Emergency Coordinator 60-minute minimum staff ERO position at the Alert emergency classification level and one (1) EOF Recovery Manager 60-minute minimum staff ERO position at the Site Area Emergency classification level to the Command and Control function.

The proposed emergency plan assigns one (1) Site Emergency Director 90-minute minimum staff ERO position at the Alert emergency classification level to the Command and Control function.

Removal of the EOF Emergency Director minimum staff ERO position is a deviation documented in Section 3 as [Potential RIE 1-1].

[Potential RIE 2-1] The proposed emergency plan adds 30 minutes to the augmentation response time for the Site Emergency Director minimum staff ERO position that performs the Command and Control function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.2 Key Function: Emergency Classifications

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign a minimum staff ERO position to the Emergency Classifications function.

The proposed emergency plan assigns one (1) TSC Classification Advisor 90-minute minimum staff ERO position to the Emergency Classifications function.

Adding the TSC Classification Advisor 90-minute ERO position enhances the capability and timeliness to perform the Emergency Classifications function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC Emergency Classification Advisor 60-minute ERO position at the Alert emergency classification level for the Emergency Classifications function.

The proposed emergency plan assigns one (1) TSC Classification Advisor 90-minute minimum staff ERO position at the Alert emergency classification to the Emergency Classifications function.

[Potential RIE 2-2] The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC Classification Advisor minimum staff ERO position that performs the Emergency Classifications function.

This change deviates from the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.3 Key Function: Communications

# 1. Emergency Plan Change Assessment

# A. Offsite Notifications (State/County)

The current emergency plan assigns one (1) TSC HRD Communicator 30-minute minimum staff ERO position at the Alert emergency classification level and one (1) EOF HRD Communicator 60-minute minimum staff ERO position at the Site Area Emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator 90-minute minimum staff ERO position to the Communications function.

# B. NRC Notifications

The current emergency plan assigns one does not include a TSC ENS Communicator minimum staff ERO position to the Communications function (ENS Communicator is non-minimum staff).

The proposed emergency plan assigns one (1) TSC ENS Communicator 90-minute minimum staff ERO position to the Communications function.

The NEI 10-05 based On-shift Staffing Analysis performed for the proposed emergency plan on-shift ERO identified no task overlap or overburden of the NRC notifications aspect of the Communications function out to 120 minutes.

Maintaining the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the NRC notifications aspect of the Communications function.

# 2. NUREG-0654 R2 Alignment Assessment

# A. Offsite Notifications (State/County)

NUREG-0654 R2 assigns one (1) ORO Communicator 60-minute ERO position at the Alert emergency classification level and one (1) EOF ORO Communicator 60-minute ERO position at the Site Area Emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator 90-minute minimum staff ERO position to the Communications function.

# B. NRC Notifications

NUREG-0654 R2 assigns one (1) TSC NRC Communicator 60-minute ERO position at the Alert emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ENS Communicator 90-minute minimum staff ERO position at the Alert emergency classification level to the Communications function.

Removal of the EOF State/County Communicator minimum staff ERO position is a deviation documented in Section 3.3 as [Potential RIE 1-2].

**[Potential RIE 2-3]** The proposed emergency plan adds 60 minutes (30 for NUREG-0654 guidance) to the augmentation response time to the TSC ORO Communicator minimum staff ERO position that performs the State/County notifications aspect of the Communications function.

This change deviates from the current emergency plan 30-minute ERO response time requirements and NUREG-0654 R2 60-minute ERO response time guidance.

[Potential RIE 2-4] The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC ENS Communicator minimum staff ERO position that performs the NRC notifications aspect of the Communications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.4 Key Function: Supervision of RP Staff and Site Radiation Protection

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC Radiological Supervisor 60-minute minimum staff ERO position to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one (1) TSC RP Coordinator and one (1) EOF RP Coordinator 90-minute minimum staff ERO positions to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC RP Coordinator 60-minute ERO position at the Alert emergency classification level and one (1) EOF RP Coordinator 60-minute ERO position at the Site Area Emergency classification level to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one (1) TSC RP Coordinator and one (1) EOF RP Coordinator 90-minute minimum staff ERO positions at the Alert emergency classification level to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

[Potential RIE 2-5] The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC RP Coordinator minimum staff ERO position that performs the Supervision of Radiation Protection Staff and Site Radiation Protection function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.5 Key Function: Dose Assessments / Projections

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC Dose Assessor 30-minute minimum staff ERO position and one (1) EOF Dose Assessment Coordinator 60-minute minimum staff ERO position to the Dose Assessments / Projections function.

The proposed emergency plan assigns one (1) Remote Dose Assessor 60-minute minimum staff ERO position and one (1) EOF Dose Assessor 90-minute minimum staff ERO positions to the Dose Assessments / Projections function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC Dose Assessor 60-minute ERO position at the Alert emergency classification level and one (1) EOF Dose Assessor 60-minute ERO position at the Site Area Emergency classification level to the Dose Assessments / Projections function.

The proposed emergency plan assigns one (1) Remote Dose Assessor 60-minute minimum staff ERO position and one (1) EOF Dose Assessor 90-minute minimum staff ERO positions to the Dose Assessments / Projections function.

Response for the EOF Dose Assessor at 90 minutes from the Alert emergency classification level is comparable to a 60 minute response from a Site Area Emergency classification level, if not sooner for all realistic events.

The proposed emergency plan meets the NUREG-0654 R2 60 and 90-minute augmentation guidance for the Dose Assessments / Projections function.

[Potential RIE 2-6] The proposed emergency plan adds 30 minutes to the augmentation response time to the Dose Assessor minimum staff ERO positions that perform the Dose Assessments / Projections function.

This change deviates from the current emergency plan 30-minute ERO response time requirements.

# 4.6 Key Function: Radiation Protection

# 1. Emergency Plan Change Assessment

The current emergency plan provides six (6) RP Technicians to a 30-minute minimum staff ERO position and six (6) RP Technicians to a 60-minute minimum staff ERO position for the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals to a 90 minute minimum staff ERO position for the Radiation Protection function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides three (3) RP Technicians to a 60 minute ERO position and three (3) RP Technicians to a 90 minute ERO position for the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals to a 90 minute minimum staff ERO position for the Radiation Protection function.

Removal of one (1) minimum staff radiation protection personnel is a deviation documented in Section 3.6 as [Potential RIE 1-5].

**[Potential RIE 2-7]** The proposed emergency plan adds 60 minutes (30 for NUREG-0654 guidance) to the augmentation response time to the radiation protection personnel minimum staff ERO positions that perform the Radiation Protection function.

This change deviates from the current emergency plan 30-minute ERO response time requirements and NUREG-0654 R2 60-minute ERO response time guidance.

# 4.7 Key Function: Field Monitoring Teams (FMTs)

# 1. Emergency Plan Change Assessment

# A. Onsite Field Monitoring

The current emergency plan assigns one (1) RP Technician to a 30-minute minimum staff ERO position and one (1) RP Technician to a 60-minute minimum staff ERO position to the onsite Field Monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

# B. Offsite Field Monitoring

The current emergency plan assigns two (2) RP Technicians as 30-minute minimum staff ERO and two (2) RP Technicians as 60-minute minimum staff ERO to the offsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan assigns two (2) Field Monitoring Technicians and two (2) Field Monitoring Drivers as 90 minute minimum staff ERO positions to the Field Monitoring Teams function.

# 2. NUREG-0654 R2 Alignment Assessment

# A. Onsite Field Monitoring

The current emergency plan assigns two (2) RP Technicians to a 30-minute minimum staff ERO position and two (1) RP Technicians to a 60-minute minimum staff ERO position to the onsite Field Monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

# B. Offsite Field Monitoring

NUREG-0654 R2 assigns one (1) offsite Field Monitoring Technician 60-minute ERO position and one (1) Field Monitoring Driver 60-minute ERO position for the Field Monitoring Teams function.

NUREG-0654 R2 assigns one (1) offsite Field Monitoring Technician 90-minute ERO position and one (1) Field Monitoring Driver 90-minute ERO position for the Field Monitoring Teams function.

The proposed emergency plan assigns (2) Field Monitoring Technicians and two (2) Field Monitoring Drivers as 90 minute minimum staff ERO to the Field Monitoring Teams function.

Removal of two (2) minimum staff RP Technicians from the onsite field monitoring aspect of the Field Monitoring Teams function is a deviation documented in Section 3.7 as [Potential RIE 1-6].

**[Potential RIE 2-8]** The proposed emergency plan adds 60 minutes (30 for NUREG-0654 guidance) to the Field Monitoring Team minimum staff ERO positions that performs the offsite field monitoring aspect of the Field Monitoring Teams function.

This change deviates from the current emergency plan 30-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.8 Key Function: Engineering

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Reactor Engineer as 30 minute position, one (1) Electrical Engineer, and one (1) Mechanical Engineer as 60 minute minimum staff ERO positions for the Engineering function.

The proposed emergency plan provides one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as 60 minute minimum staff ERO positions for the Engineering function.

The proposed emergency plan is consistent with the current emergency plan regarding the Engineering function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Nuclear Engineer, one (1) Electrical Engineer, and one (1) Mechanical Engineer 60-minute ERO positions to the Engineering function.

The proposed emergency plan assigns one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as 60-minute minimum staff ERO positions to the Engineering function.

The proposed emergency plan is consistent with the NUREG-0654 R2 guidance regarding the Engineering function.

[Potential RIE 2-9] The proposed emergency plan adds 30 minutes to the augmentation response time to the Reactor Engineer minimum staff ERO position that performs the Engineering function.

This change deviates from the current emergency plan 30-minute ERO response time requirement.

# 4.9 Key Function: Supervision of Repair Team Activities

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) 60-minute OSC Manager, one (1) 60-minute OSC Supervisor, and (1) 60-minute RP Supervisor as minimum staff ERO positions to the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) FIN Supervisor as 90-minute minimum staff ERO positions to the Supervision of Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) 60-minute OSC Supervisor, one (1) 90-minute Electrical Supervisor, one (1) 90-minute Mechanical Supervisor, one (1) 90-minute I&C Supervisor, and one (1) 90-minute RP Supervisor ERO positions for the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) FIN Supervisor as 90-minute minimum staff ERO positions to the Supervision of Repair Team Activities function.

Removal of OSC RP Supervisor from the Supervision of Repair Team Activities function is a deviation documented in Section 3 as [Potential RIE 1-7].

Use of the FIN Supervisor for supervision of all craft is a deviation documented in Section 3.9 as [Potential RIE 1-8].

[Potential RIE 2-10] The proposed emergency plan adds 30 minutes to the augmentation response time for the Lead OSC Supervisor and FIN Supervisor minimum staff ERO position that performs the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan 60-minute ERO response time requirement for the OSC Manager and OSC Supervisor, and the NUREG-0654 R2 60-minute ERO response time guidance for the Lead OSC Supervisor.

# 4.10 Key Function: Repair Team Activities

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Electrician and one (1) I&C Technician as 30-minute minimum staff ERO positions, and one (1) Electrician and two (2) Mechanics as 60-minute minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician as 90-minute minimum staff ERO positions to the Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) 60-minute Electrician, one (1) 60-minute Mechanic, and one (1) 90-minute I&C Technician minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician as 90-minute minimum staff ERO positions to the Repair Team Activities function.

Removal of one (1) Electrician and one (1) Mechanic from Repair Team Activities function is a deviation documented in Section 3 as [Potential RIE 1-9].

[Potential RIE 2-11] The proposed emergency plan adds 30/60 minutes to the augmentation response time of OSC craft minimum staff ERO positions that perform the Repair Team Activities function.

This change deviates from the current emergency plan 30 and 60-minute ERO response time requirements and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.11 Key Function: Security

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Security Supervisor non-minimum staff ERO position for the Security function.

The proposed emergency plan provides one (1) Security Liaison 90-minute minimum staff ERO position for the Security function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) Security Liaison 60-minute ERO position for the Security function.

The proposed emergency plan provides one (1) Security Liaison 90-minute minimum staff ERO position for the Security function.

[Potential RIE 2-12] The proposed emergency plan adds 30 minutes to the augmentation response time to the Security Liaison minimum staff ERO position that performs the Security function.

This change deviates from the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.12 Key Function: Media Information

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) JIC Manager as a non-minimum staff ERO position to the Media Information function. Non-ERO JIS personnel are staffed from FP&L Company Communications Department.

The proposed emergency plan provides JIC/JIS staff ERO positions capable of responding to media and public inquiries for abnormal conditions and events at any declared emergency classification level within 60 minute.

The proposed emergency plan assigns one (1) Site JIS Manager, one (1) Site JIS Coordinator, and one (1) Remote JIS Manager as 90 minute minimum staff ERO positions to the Media Information function. The proposed emergency plan also changes the JIC JIS Technical Liaison from a 60 minute minimum staff ERO position to a non-minimum staff ERO position. Non-ERO JIS personnel are staffed from NextEra Nuclear Marketing/ Communications group.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns 60 and 90-minute JIC/JIS staff ERO positions capable of performing the Media Information function.

The proposed emergency plan assigns 60 and 90-minute JIC/JIS staff ERO positions capable of performing the Media Information function.

The proposed emergency plan meets the NUREG-0654 R2 60 and 90-minute augmentation guidance for the Media Information function.

# 4.13 Key Function: Information Technology

# 1. Emergency Plan Change Assessment

The current emergency plan does not provide a TSC IT Technician or EOF IT Technician minimum staff ERO position for the Information Technology function.

The proposed emergency plan does not provide a TSC IT Technician or EOF IT Technician minimum staff ERO position for the Information Technology function.

No functional changes have been made to the minimum staff ERO positions for the Information Technology function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) 90-minute TSC IT Technician and one (1) 90-minute EOF/JIC IT Technician minimum staff ERO position for the Information Technology function.

The proposed emergency plan does not provide a TSC IT Technician or EOF IT Technician minimum staff ERO position for the Information Technology function.

The lack of the 90-minute TSC and EOF IT Technician ERO positions is a deviation documented in the ERO Functional Analysis Section 3.13 as [Potential RIE 1-10].

## 5.0 NON-MINIMUM STAFF ERO STAFFING

The current emergency plan and implementing procedures describe the required minimum staff ERO (i.e., if any position is not staffed, then the emergency plan cannot be effectively implemented). The current implementing procedures also contains trained and qualified non-minimum staff ERO positions that are available to assist the minimum staff ERO (for tasks such as administration, communications, coordination, and logistics).

By procedure, the non-minimum staff ERO positions are called out at the same time as minimum staff ERO positions. NextEra uses an all-call notification method, where all individuals qualified to fill an ERO position are notified and expected to respond to their assigned facilities. The presence of the non-minimum staff ERO positions is not required to activate the respective ERFs.

NUREG-0654 R2 guidance does not discuss non-minimum staff ERO positions. In NUREG-0654 R2 guidance, Table B-1, Note iii addresses the required minimum staffing as compared to other staff not critical to effective emergency plan implementation. Note iii states:

The minimum ERO staffing plan is that which is required to effectively implement the site-specific emergency plan (i.e., the emergency plan cannot be effectively implemented without this staff). The emergency plan should describe the minimum ERO staffing plan, while supporting implementing procedures can describe any other staff response desired by the licensee as long as this staff is not critical to effective emergency plan implementation. The augmentation times listed are intended to provide a model for applicants and licensees to consider in the development of their site-specific emergency plan.

The intent of this note is to emphasize the distinction between minimum staff ERO positions required to implement the emergency plan and non-minimum staff ERO positions that provide assistant but are not essential to the response activities.

Several non-minimum staff ERO positions remain in the implementing procedures and will continue to be notified and respond at an Alert or higher emergency classification level, at the same time as the minimum staff ERO; however, the non-minimum staff ERO positions are not required to be present to activate the Emergency Response Facilities (ERFs) or relieve the on-shift ERO of any emergency plan responsibilities.

The table below identifies the current minimum and non-minimum staff ERO positions, by facility, in comparison to the proposed minimum and non-minimum staff ERO positions. The positions have been dispositioned as follows:

Current E-Plan / Procudures	Proposed E-Plan	Disposition
TSC		
Emergency Coordinator	Site Emergency Director	Title Change
EC Assistant Logkeeper		Non-Minimum Staff Position Eliminated
TSC Supervisor	TSC Coordinator	Changed from minimum to non-
		minimum staff ERO position
TSC RP Supervisor	TSC RP Coordinator	Title Change
Dose Assessor		Minimum Staff Position Eliminated
Offsite Monitoring	FMT Technician	Moved to EOF From OSC RPTs
Personnel		
FM Driver	FMT Driver	Moved to EOF From OSC RPTs
HRD Communicator	ORO Communicator	Title Change
ENS Communicator	ENS Communicator	No Change
Reactor Engineer	Reactor Engineer	Remote Position
PST I&C Rep		Provided by IT Help Desk

Current E-Plan / Procudures	Proposed E-Plan	Disposition
PST Electrical REP	Electrical/I&C Engineer	Combined I&C and Electrical
	g	Engineers Remote Position
PST Mechanical REP	Mechanical Engineer	Remote Position
PST Leader	meenamear Engineer	Non-Minimum Position Eliminated
TSC Security Supervisor	Security Liaison	Title Change
TSC Operations Coordinator	TSC Classification Advisor	Changed from non-minimum to
100 Operations Coordinator	100 Classification Advisor	minimum staff ERO position/Title
		Change
PST SRO Rep		Non-Minimum Position Eliminated
EP Coordinator		Non-Minimum Position Eliminated
WebEOC/Logkeeper		Non-Minimum Position Eliminated
EOF Communicator	TCC FDF Communicator	
	TSC ERF Communicator	Title Change
Facility Support		Non-Minimum Position Eliminated
OSC	1 10000	T-11 01
OSC Manager	Lead OSC Supervisor	Title Change
OSC Supervisor	FIN Supervisor	Title Change
OSC RP Supervisor		Minimum Staff Position Eliminated
RP Personnel	RP Technician	No Change
	RP Qualified Individual	Title Change (training changed)
Mechanic	Mechanic	No Change
Electrician	Electrician	No Change
I&C Specialist	I&C Technician	Title Change
Chemist		Not included in NUREG-0654 E-Plan
Chambe		unless assigned EP tasks
Mechanical Re-Entry		Non-Minimum Position Eliminated
Supervisor		Tron William Footion Eliminated
Operations Re-entry		Non-Minimum Position Eliminated
Supervisor		Non-iviilinan i ositon Eliminated
Chemistry Supervisor		Non-Minimum Position Eliminated
I&C Re-Entry Supervisor		Non-Minimum Position Eliminated
Electrical/I&C Coordinator		Non-Minimum Position Eliminated
Assembly Area Supervisor		Non-Minimum Position Eliminated
		Non-Minimum Position Eliminated
Facility Support OSC Recorder	OCC FDF Communicator	
	OSC ERF Communicator	Title Change
OSC ISC Staff Rep		Non-Minimum Position Eliminated
OSC Security Officer		Non-Minimum Position Eliminated
EOF	TEOE M	T-11 01
Recovery Manager	EOF Manager	Title Change
RM Operations Advisor		Minimum Staff Position Eliminated
S/C Communicator (Hot Ring		Minimum Staff Position Eliminated
Down)		
Dose Assessment / FMT	EOF Dose Assessor	Title Change
Coordinator		
Emergency Security Manager		Minimum Staff Position Eliminated
Technical Assistant to the RM		Non-Minimum Position Eliminated
ENS Communicator		Non-Minimum Position Eliminated
Emergency Technical		Non-Minimum Position Eliminated
Manager		
EOF RP Manager	EOF RP Coordinator	Changed from non-minimum to
		minimum staff ERO position/
		Title Change
Log Support Coordinator	Admin Coordinator	Title Change
Admin Support		Non-Minimum Position Eliminated
T	Resource Coordinator	Remote position
HPN Communicator		Non-Minimum Position Eliminated
THE TOTAL PROPERTY OF THE PROP		11017 Millimant 1 Conton Emilliated

Current E-Plan / Procudures	Proposed E-Plan	Disposition
IM Support	IT Support	Non-Minimum Position provided by IT
		Help desk
County EOC Technical Advisor	County Liaison	Title Change
Govt Affairs Rep	State Liaison	Title Change
JIC/JIS		
JIC Manager	Site JIS Manager	Title Change
Assistant JIC Manager	Site JIS Coordinator	Changed from non-minimum to
		minimum staff ERO position/Title
		Change
JIC Technical Briefer	JIS Technical Liaison	Changed from non-minimum to
		minimum staff ERO position/Title
		Change
Media Center Coordinator	Media Coordinator	Changed from non-minimum to
		minimum staff ERO position/Title
		Change
Corporate JIC Manager	Remote JIS Manager	Remote position/Title Change

Note: Shaded position are non-minimum staff ERO positions

Each EP task assigned to the minimum and non-minimum staff ERO positions in the current emergency plan is evaluated and dispositioned in Analysis Report #1 ERO Task Analysis.

			NUREG-0654 R2 Current E-Plan			Pro	posed E-	Plan				
			Alert	Alert	SAE		Alert	Alert	SAE		Alert	Alert
Function	Position Title	Shift	60 Min	90 Min	60 Min	Shift	30 Min	60 Min	60 Min	Shift	60 Min	90 Min
Plant Systems	Unit Supervisor					2						
Operations	Reactor Operator					4						
Operations	Auxiliary Operator/Fire Brigade					7						
0	Shift Manager	1				1				1		
Command and Control / Facility	Site Emergency Director (TSC)		1					1				1
	EOF Manager (EOF)				1				1			1
Management	TSC Supervisor (TSC)							1				
Emarganay	Classification Advisor (CR)	1(a)								1(a)		
Emergency Classifications	Classification Advisor (TSC)		1					1				1
Classifications	RM Operations Advisor (EOF)								1			
	Shift Communicator	1(a)				1(a)				1(a)		
Communications	ORO Communicator (TSC)		1					1	1			1
Communications	ENS Communicator (TSC)		1									1
	ORO Communicator (EOF)				1							
Cumamiaian DD	Shift Manager	1(a)								1(a)		
Supervision RP Activities	TSC RP Coordinator (TSC)		1									1
Activities	EOF RP Coordinator (EOF)				1							1
Radiation Protection	RP Technician	2	3	3		2	6	6		1		3
Radiation Protection	RP Qualified Individual									1		2
	Shift Dose Assessor	1(a)								1(a)		
Dose Assessments /	EOF Dose Assessor (EOF)		1				1					1
Projections	Dose Assessment Coordinator		1						1			
	Remote Dose Assessor										1	
	Onsite FMT Technician		1					1	2			
Field Monitoring	Onsite FMT Driver		1					1	2			
Teams	Offsite FMT Technician (TSC)		1	1			2	2				2
	Offsite FMT Driver (TSC)		1	1								2

		NUREG-0654 R2			Current E-Plan				Proposed E-Plan			
			Alert	Alert	SAE		Alert	Alert	SAE		Alert	Alert
Function	Position Title	Shift	60 Min	90 Min	60 Min	Shift	30 Min	60 Min	60 Min	Shift	60 Min	90 Min
	Lead OSC Supervisor (OSC)		1					1				1
	FIN Supervisor (OSC)							1				1
	Electrical Supervisor (OSC)			1								
Supervision of Repair Team	Mechanical Supervisor (OSC)			1					•			
Activities	I&C Supervisor (OSC)			1								
Activities	RP Supervisor (OSC)			1								
	Maintenance Manager (TSC)											
	Chemistry Supervisor (TSC)											
	Electrician (OSC)		1				1	1				1
Repair Team	Mechanic (OSC)		1					2				1
Activities	I&C Technician (OSC)			1			1					1
	Chemistry Technician (OSC)							1				N/A
	STA	1(a)				1		1		1(a)		
Engineering and	Electrical/I&C Engineer (Remote)		1					1			1	
Plant Monitoring	Mechanical Engineer (Remote)		1					1			1	
	Reactor Engineer (Remote)		1				1				1	
	Security Shift Supervisor									1		
Security	Security Force	(b)				(b)				(b)		
Security	Security Liaison (TSC)		1									1
	Emergency Security Manager (EOF)								1			
	JIS / JIC Staff		(c)		(c)							
Media Information	Site JIS Manager (Site)									(c)		1
Wiedia iiiioiiiialioii	Site JIS Coordinator (Site)									(c)		1
	Remoter JIS Manager (Remote)									(c)		1
Information	IT Coordinator (TSC)			1								(d)
Technology (IT)	IT Coordinator (EOF)				1							(d)
	ERO Totals – Full Breakdown	3	20	11	5	5	12	23	9	4	4	26
	als – On-shift and Minimum Staffing			36		5 44			4	4 30		
ERO T	otals – All Required Positions Filled		3	9			4	.9			34	

<sup>(</sup>a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.

<sup>(</sup>b) Per the site Security Plan.

<sup>(</sup>c) Does not need to be performed in the JIC, but function needs to be established at this point. ERO response to and activation of the JIC is coordinated with the offsite agencies and carries no time requirement.

<sup>(</sup>d) IT personnel monitor critical digital assets remotely and respond any time an issue is identified.

# **ENCLOSURE 8**

# Turkey Point Nuclear Plant Analysis Report #2 ERO Key Function and Augmentation Analysis

(72 pages follow)





# Turkey Point Nuclear Plant (PTN)

# Analysis Report #2 ERO Key Function and Augmentation Analysis

12/09/22

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## 1.0 INTRODUCTION

NextEra has developed the proposed emergency plan using the NUREG 0654/FEMA-REP-1, Revision 2 (NUREG-0654 R2). This analysis was conducted to identify and justify deviations to the proposed Emergency Response Organization (ERO) from the current emergency plan and alternative approach to the NUREG-0654 R2 guidance.

The NRC has provided Technical Basis for The Proposed Guidance in NUREG-0654/FEMA-REP-1, Section II.B, "Emergency Response Organization" to assist licensees in their development of site-specific staffing plans, particularly when the licensee may want to develop an alternative approach. The technical basis document contains information regarding;

- the importance of each key function for effective emergency response.
- the basis for the positions and number of responders selected to fulfill those functions.
- the basis for the augmentation times to relieve on-shift personnel of those functions.

Additionally, NRC has issued RIS 2016-10, License Amendment Requests for Changes to Emergency Response Organization Staffing and Augmentation.

The NRC 0654/FEMA-REP-1 Section II.B technical basis document and RIS 2016-10 were used in the development of the ERO key functional and augmentation analyses.

Summary of this analysis is contained in the License Amendment Request enclosures 1, 2, 3 and 4. The summary identifies the deviations and alternate approaches, reason for the changes, and the basis concluding that the proposed emergency plan continues to meet the planning standards in 10 CFR 50.47(b) and the requirements in Appendix E to 10 CFR Part 50.

# 1.1 REGULATORY REQUIREMENTS

The planning standards in 10 CFR 50.47(b) establish the requirements that the onsite and offsite emergency response plans must meet for the NRC staff to make a finding that there is reasonable assurance that the licensee can, and will, take adequate protective measures in the event of a radiological emergency. The capabilities of on-shift and augmented ERO staffing are addressed under the following regulations:

- 10 CFR 50.47(b)(2) states, "On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified."
- 10 CFR 50.47(b)(9), states, "Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use."
- 10 CFR 50.47(b)(11), states, in part, "Means for controlling radiological exposures, in an emergency, are established for emergency workers...."
- Appendix E to 10 CFR Part 50, "Emergency Planning and Preparedness Production and Utilization Facilities," Section IV, Part A, "Organization," states, in part, "The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization...."

# 1.2 Guidance

NUREG-0654 R2, Section II, "Planning Standards and Evaluation Criteria," Evaluation Criteria II.B. addresses the Emergency Response Organization planning standard 10 CFR 50.47(b)(2) and the applicable sections of Appendix E to CFR Part 50. Evaluation Criterion II.B.3 specifies:

A table is developed depicting the site-specific on-shift staffing plan, as well as the ERO staffing augmentation plan. Table B-1, "Emergency Response Organization (ERO) Staffing and Augmentation Plan," provides a model for licensees to consider.

The NUREG-0654 R2 Table B-1 lists the Emergency Preparedness functions and augmentation times needed to Implement the typical emergency plan. The table is a model to be considered in the development of a site-specific emergency plan.

NextEra has developed the proposed emergency plan based upon based upon NUREG-0654 R2, Evaluation Criteria II.B.5 for minimum ERO on-shift and augmentation staff. The proposed ERO staffing plan contains an alternate approach which was evaluated using the functional area analysis of NUREG-0654 R2 and as much as possible a performance-based approach.

Along with evaluating the proposed ERO plan, this analysis report makes available sufficient bases and information for the NRC staff to evaluate whether the proposed alternative methods meet the intent of the regulatory planning standards and does not relax the regulatory planning standards.

The alternative methods are based upon the precedence of previously approved license amendment requests referenced in the document and others are considered first-of-a-kind (FOAK) methods.

## 2.0 DEVIATION SUMMARY

# 2.1 <u>ERO Key Function Analysis</u>

The ERO Key Function Analysis compares and evaluates the current emergency plan on-shift and minimum staff ERO positions against those in the proposed emergency plan and in NUREG-0654 R2 guidance. Staffing deviations in the proposed emergency plan from the current emergency plan and NUREG-0654 R2 are categorized as potential RIEs and evaluated to determine whether the capability to perform the function is sustained (no degradation or loss of function).

Refer to Attachment 1, ERO Staffing Plan Comparison Table, for a side-by-side summary of staffing and augmentation comparison between NUREG-0654 R2 Table B-1, the current emergency plan, and the proposed emergency plan.

The Key Function Analysis establishes that no degradation or loss of function, or misalignment or loss of task assignment would occur as a result of any change made to the on-shift and minimum augmenting ERO positions. This alternate staffing approach continues to support timely and effective performance of the Major Functional Areas and Major Tasks listed in NUREG-0654 R2 Table B-1.

# 2.1.1 [Potential RIE 1-1] No EOF Director/ED Position

The proposed emergency plan does not assign an EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level for the Command and Control function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Command and Control function from two (2) to one (1).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

For a SAE ECL, or greater, these functions (or a subset of them), typically those associated with protective action recommendations (PARs), should be assigned to an Emergency Director located in the EOF....

The NextEra TSCs and EOFs are activated at an Alert emergency classification level. By activating both the TSC and EOF at an Alert emergency classification level and maintaining the non-delegable tasks of classification, notification, and PARs in the TSC, the proposed emergency plan does not need to provide additional augmenting ERO positions to move those tasks between emergency response facilities.

An EOF Emergency Director minimum staff ERO position is not needed at the Site Area Emergency classification level as the Command and Control function, along with all non-delegable responsibilities, are transferred from the Shift Manager to the Site Emergency Director at the Alert emergency classification level and remain in the TSC throughout a declared emergency. This change in the proposed emergency plan simply retains the Command and Control function in the TSC with the Site Emergency Director.

### 2.1.2 [Potential RIE 1-2] No EOF ORO Communicator Position

The proposed emergency plan does not provide an EOF ORO Communicator minimum staff ERO position at the Site Area Emergency classification level for the Communications function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the ORO aspect of the Communications function from two (2) to one (1).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing quidance states that:

This function should consist of 2 staff members to fulfill the communication needs, at a minimum: 1 for the NRC and 1 for ORO notification and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee. These are typically located in the TSC. For an SAE ECL, or greater, at least 1 additional communicator should be staffed in the EOF.

NUREG-0654 R2 guidance designates the Offsite Response Organization (ORO) (State/County) communication location as 'typically' in the TSC based on staggered activation of the emergency response facilities.

The NextEra TSCs and EOFs are activated at an Alert emergency classification level. By activating both the TSC and EOF at an Alert emergency classification level and maintaining the non-delegable tasks of classification, notification, and PARs in the TSC, the proposed emergency plan does not need to provide additional augmenting ERO positions to move those tasks between emergency response facilities.

An EOF State/County Communicator minimum staff ERO position is not needed at the Site Area Emergency classification level as the Communications function for the ORO remains in the TSC throughout a declared emergency. This change in the proposed emergency plan simply retains the Communications function for the ORO in the TSC.

# 2.1.3 [Potential RIE 1-3] On-shift RP Personnel Allowed Collateral Duties

The proposed emergency plan allows collateral duty assignments to be given to radiation protection personnel when performing the Radiation Protection function. Specifically, this change allows radiation protection personnel to perform the Dose Assessment /Projections function and support other on-shift actions when not assigned a response activity.

This change deviates from the NUREG-0654 R2 on-shift staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

The ability to provide radiological expertise when the plant is experiencing an event with serious radiological consequences is crucial, due to the unknown radiological environment faced by emergency workers, particularly at the onset of the event. This function should be staffed by 2 qualified RP staff members on-shift (or 1 per unit for multi-unit sites). These staff members should not have any collateral duties during emergency response.

Consistent with NUREG-0654 R2, the proposed emergency plan assigns the Dose Assessments / Projections as a collateral duty. This emergency response collateral duty can be assigned to any on-shift individual qualified in Dose Assessment.

Personnel who are not ANSI qualified RPTs, such as an appropriately trained and qualified operator or a chemistry technician, may be assigned to the dedicated on-shift RPQI position. When the RPQI position is not filled by a qualified ANSI RPT, they cannot be given time sensitive or other tasks during emergency response that interfere with the Radiation Protection function.

### 2.1.4 [Potential RIE 1-4] Fewer OSC RP Response Personnel

The proposed emergency plan reduces the number and qualifications of minimum staff ERO positions for the Radiation Protection function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Radiation Protection function from six (6) in the current emergency plan and in NUREG-0654, to five (5) in the proposed emergency plan, consisting of three (3) RPTs and two (2) RP Qualified individuals that are task trained but not required to be ANSI equivalent RPTs.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

While not all Alert ECLs (or lower) have radiological consequences, licensees should develop their ERO staffing plans for a worst-case scenario from a radiological risk perspective, i.e., an event which results in the immediate (within 60-minutes) loss of 2 or more fission product barriers leading to significant and unknown radiological conditions. The augmentation (support) of this position should occur in two stages: within 60 minutes of an Alert ECL or greater, 3 additional qualified RP staff should be available, and within 90 minutes of an Alert ECL, or greater, an additional 3 additional qualified RP staff should be available, and both are typically staffed in the OSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Personnel assigned to perform this function should be fully qualified HP technicians as described in ANSI/ANS-3.1-1993, "Selection, Qualification, and Training of Personnel for Nuclear Power Plants," that was approved for use by Regulatory Guide 1.8, "Qualification and Training of Personnel for Nuclear Power Plants."14 Personnel who are typically trained to a level of "meter qualified" to perform basic HP duties are not trained or do not have the necessary experience to perform complex HP duties, as discussed in HPPOS-0238, that would be necessary in a radiological emergency. For example:

- (1) Typically the training does not include providing HP coverage for other personnel.
- (2) Radiation protection is not normally incorporated into normal job duties.
- (3) Radiological conditions during an emergency may be unknown or rapidly changing.

The following Emergency Plan functions would constitute in-plant protective actions, which would require a fully qualified HP technician:

- Provide guidance for personnel protection to assist in minimizing personnel exposure.
- Provide guidance for exposure authorizations, dose guidelines, and postexposure assessments.

- Provide job coverage for in-plant repair and corrective actions, and operations support, under changing radiological conditions.
- Provide guidance for emergency decontamination of personnel, equipment, and facilities.
- Provide guidance for personnel contamination control and respiratory protection.

NUREG-0654 R1 lists the RPT functions assigned to the six augmenting OSC RPTs as:

- In-Plant Surveys
- HP coverage for repair, corrective actions, search, and rescue first aid & firefighting
- Personnel Monitoring
- Dosimetry
- Access Control

These functions have been reworded but remain similar in NUREG-0654 R2 as:

- Provide in-plant surveys
- Provide radiation protection coverage for responders accessing unknown radiological environments during emergency conditions
- Control dosimetry and control area access

The number of augmenting RPTs for the above functions in NUREG-0654 R2 Table B-1 has not changed from the number in NUREG-0654 R1 Table B-1.

The following guidance documents were considered in the staffing of augmenting ERO radiation protection personnel in the common emergency plan:

- Per RIS 2016-10, the licensee could show that the basis for the justification includes the availability of installed area, process, airborne and effluent radiation monitors, automated systems and information technology solutions, and enhanced work processes that would be available under accident conditions. Supporting tools and processes that may be considered include portal monitors, self-alarming dosimeters, and automated access control system for the radiologically controlled area (RCA) that maintain active radiation work permits, which are readily available if an emergency is declared (e.g., the system verifies qualifications, dose margins, and access requirements).
- Per HPPOS-238, Health Physics Technicians (HPTs) may independently perform specific tasks or job assignments if they meet the required prerequisites and complete the required task qualifications of their plant training programs. There are certain tasks and job assignments, however, that require in-depth knowledge and can only be performed by fully qualified ANSI technicians.

NextEra controls the qualification of the ERO as outlined in 10 CFR 50.47(b)(15). To ensure that qualifications are consistent throughout the fleet, the RPQI qualification requirements are maintained in Section O of the proposed emergency plan. The RPQI ERO personnel will be task qualified to the tasks listed in NUREG-0654 Revision 2 Table B-2 (shown above)

This approach meets the intent of 50.47(b)(15) and allows the Systematic Approach to Training (SAT) process to determine and control the RPQI qualification requirements by task. The proposed emergency plan will utilize the SAT process to set the qualification requirements of the RPQI, independent of an ANSI 8.1 standard, while ensuring that all

personnel are trained to be able to respond to an emergency – not to be a day-to-day RPT.

Per NUREG-0713, Occupational Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities 2004 and Draft Tables and Figures for 2020 NUREG-0713, the Average Measurable TEDE per individual has decreased from 0.31 rem (1995) to 0.09 rem (2020). Advances in technology in access control, electronic dosimetry (personnel monitoring and remote monitoring), pre-developed RWPs (for normal and for emergency conditions), and ARM/PRM plant computer information display systems reduce radiation protection personnel involvement in radiological activities and have contributed to the decrease.

- Dosimetry and access control is established using technological means to ensure that personnel wear the correct dosimetry into the radiological controlled area and are signed onto the RWP (affirming that they have read and understand the RWP). Telemetry with field communications and dosimetry can provide the RP personnel with all data that one would have previously needed equipment and multiple personnel to perform.
- On-shift and augmented ERO radiation protection coverage is monitored and provided by radiation protection personnel. The radiation protection personnel ensure that dispatched personnel are provided real time information on radiological conditions when deployed and if conditions change at the work location. In-plant radiological conditions are provided using technology available to the radiation protection personnel on the plant computer information display systems.

As this technology has become more integrated at NextEra sites and throughout the industry for normal and outage operations their use has become commonplace. As such, radiation protection personnel that are properly trained on the technology outlined here are proficient with their use in emergency response functions. These enhancements would be used during a radiological emergency.

The OSC utilizes the day-to-day "Fix-It-Now" (FIN) Team concept, which includes radiation protection support as necessary. OSC minimum staffing requires 3 craft personnel. An RPT would monitor plant conditions remotely and assist the Lead OSC Supervisor with RP oversight activities while the other RP personnel (RPTs and RPQIs) could be tasked with providing coverage for craft personnel if a team is dispatched into a radiologically controlled area.

All NextEra sites are Pressurized Water Reactor (PWR) designs. There are fewer radiologically controlled areas at PWRs than at Boiling Water Reactor (BWR), which allows for less RP support staff during normal operations. Per Draft Tables and Figures for 2020 NUREG-0713, the Average Collective Dose per Reactor in 2020 is 31 person-rem at PWRs and 95 person-rem at BWRs. Even with a SG tube rupture using the main condenser as the cooldown medium, the turbine buildings will not be unmanageable with the responders as the major steps of each site's emergency operating procedures for a SG tube rupture will have completed their major functions of "identify – isolate – cooldown – depressurize – terminate safety injection" are expected to be complete prior to ERO arrival. All temperature control steps later in the procedures where the ERO may be present will be minimal temperature control steps which send minimal additional contaminated steam into the secondary systems. As the limiting accident that will expand radioactively controlled/ contaminated areas outside of the radiologically controlled area, there is no need to staff PWR sites at the same level outlined in the NUREG, which factored in BWR designs into their calculations for staffing levels.

The above statements support the position that Radiation Protection function can be performed by the four augmentation radiation protection personnel ERO positions.

### 2.1.5 [Potential RIE 1-5] No On-site Field Monitoring Team

The proposed emergency plan does not staff the onsite field monitoring minimum staff ERO position for the Field Monitoring Teams function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the onsite field monitoring aspect of the Field Monitoring Teams function from two (2) to zero (0).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

The ability to locate, monitor, and track a radioactive plume is important to ensure appropriate protective measures are taken in response to a radiological event. The ability to staff these teams before they may be needed (i.e., before a radiological release) greatly enhances the ability of the licensee to provide timely and accurate PARs.

- An onsite FMT should be staffed, consisting of a monitor and a driver. This onsite FMT is responsible for radiological monitoring of the site's Protected Area. ...
  - i. The monitor should be qualified to assess radiation and contamination levels, but need not be an ANSI qualified RP Technician as long as the FMT is under the direct supervision of senior staff in the TSC or EOF.
  - iii. The driver should be knowledgeable about the vehicle and the proposed routes to be traversed.

NUREG-0654 R2 Table B-1 guidance for augmenting Field Monitoring Team staffing has not changed from NUREG-0654 R1 (six total personnel) despite the technology (equipment and communications) and process advancements in the last 40+ years.

NUREG-0654 R2 designates one on-site (including inside of the Protected Area) Field Monitoring Team and one off-site Field Monitoring Team responding in 60 minutes to be ready to respond to a radiological release or to detect the radiation in the field thus confirming and quantifying a release. A second off-site Field Monitoring Team responding in 90 minutes is added to back up the first off-site Field Monitoring Team.

### On-site Field Monitoring Team Driver ERO Position

On-site survey and sampling activities are performed without a vehicle since the site Protected Area boundaries are relatively small and plume tracking is not applicable. The Protected Area can be easily and efficiently traversed on foot or in a utility vehicle. The survey equipment is portable and does not require two individuals for transport or operation. Thus, there is no need for an on-site Field Monitoring Team Driver.

### On-site Field Monitoring Team Technician ERO Position

The current emergency plan utilizes two Field Monitoring Teams, primarily assigned to monitor conditions outside the Protected Area. NextEra typically uses an individual from the pool of OSC radiation protection personnel to perform on-site out-of-plant (inside the Protected Area) surveys if needed. However, one of the two Field Monitoring Teams may be called upon to enter the Protected Area to perform surveys when OSC radiation protection personnel are assigned other tasks.

For NextEra stations, two Field Monitoring Teams are sufficient to perform on-site and off-site field monitoring activities. All NextEra sites are located on major bodies of water (their EPZs being approximately 40% water or greater) with no requirements nor capabilities for monitoring activities on these bodies of water. As each site's EPZ is

~40+% water, there is not as much area to cover for the field monitoring teams. With NextEra EPZs being effectively smaller than landlocked sites, less personnel are needed to cover an effectively smaller EPZ.

Additionally, the NUREG-0654 R2 technical basis for the ERO staffing guidance includes the following clarification:

The onsite FMT should not be staffed if the radiological conditions jeopardize the safety of the FMT, typically after a Site Area Emergency has been declared.

Based upon NRC guidance two Field Monitoring Teams are sufficient to monitor radiological conditions after a SAE is declared. By not designating onsite and offsite FMTs, a total of two FMTs can sufficiently provide radiological monitoring at NextEra stations under all conditions.

## 2.1.6 [Potential RIE 1-6] No Dedicated On-shift STA

The proposed emergency plan does not assign a dedicated on-shift individual to the Engineering function. Specifically, this change reduces the overall number of on-shift minimum staff ERO positions used for the Engineering function from one (1) to zero (0).

This change deviates from the current emergency plan on-shift staff ERO position requirements.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

An engineer to monitor and evaluate changing core/thermal hydraulic issues is important to effective emergency response because monitoring and evaluating core conditions, or thermal hydraulic conditions of the reactor coolant system, can support timely corrective action(s), ECL declarations, and subsequent PARs. Radiological events from a power reactor come from damage to an operating reactor core, or the systems used to cool the core, and engineering expertise in this area can greatly benefit the licensee's response. This function is typically assigned to a pre-existing on-shift staff member as a collateral duty thus necessitating an on-shift staffing analysis under 10 CFR Part 50, Appendix E, Section IV.A.9 to ensure that this EP function can be performed when needed without any additional competing priorities.

Current PTN Technical Specifications allow for the STA position to be assigned as a collateral duty provided applicable qualification conditions are met. This change is consistent with Technical Specifications. A dedicated STA ERO position is not necessary to adequately perform on-shift response activities.

This change is consistent with the staffing plan of NUREG-0654 R2.

### 2.1.7 [Potential RIE 1-7] No OSC RP Supervisor Position

The proposed emergency plan does not include an OSC RP Supervisor minimum staff ERO position to the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

An ... RP Supervisor should be staffed within 90-minutes of an SAE ECL, or greater, and is typically staffed in the OSC. The OSC Supervisor can effectively manage the craft [personnel] resources for the additional 30-minutes prior to the [supervisory]

respond, as demonstrated through drills and exercises, without compromising the staff's reasonable assurance finding in accordance with 10 CFR 50.47(a).

The Lead OSC Supervisor is assigned the RP aspect of the Supervision of Repair Team Activities. To ensure that Lead OSC Supervisor position can perform the RP supervision sub-function, their ERO training / qualification program will include previous RP Supervisor experience or will receive training to supervise RP emergency response tasks. See Section O of the proposed emergency plan for the description of the qualification of the Lead OSC Supervisor.

OSC radiation protection personnel responding to the event will report to the Lead OSC Supervisor. With 3 RPTs and 2 RPQIs responding, an RPT can assist the Lead OSC Supervisor and FIN Supervisor with coordination of RP activities needed to dispatch OSC teams, thus not overburdening the Lead OSC Supervisor. If there is a particular question for RP supervision, the TSC RP Coordinator would also be available to answer or coordinate a response to questions.

## 2.1.8 **[Potential RIE 1-8]** Single Craft Supervisor Position

The proposed emergency plan does not assign OSC maintenance supervisors for each craft. Specifically, this change reduces the number of OSC craft supervisor minimum staff ERO positions used for the Supervision of Repair Team Activities function from three (3) to one (1).

This change deviates from the NUREG-0654 R2 minimum staff ERO guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

An Electrical Supervisor, a Mechanical Supervisor, an I&C Supervisor ... should be staffed within 90-minutes of an SAE ECL, or greater, and is typically staffed in the OSC. The OSC Supervisor can effectively manage the craft [personnel] resources for the additional 30-minutes prior to the [supervisory] respond, as demonstrated through drills and exercises, without compromising the staff's reasonable assurance finding in accordance with 10 CFR 50.47(a).

The FIN Supervisor fills the supervisor role for mechanical, electrical and I&C craft disciplines. This is a deviation from NUREG-0654 R2 guidance which only discusses combining Electrical and I&C supervisory roles.

The normal station maintenance organization allows for the management of craft personnel under a single supervisor hierarchy. The position of FIN Supervisor is filled by management and supervisory personnel from the Maintenance Department who are familiar with the direction of all disciplines within the department. OSC performance under this organizational structure has been demonstrated in numerous evaluated exercises and remains consistent with the acceptable OSC staffing hierarchy of the current emergency plan.

### 2.1.9 **[Potential RIE 1-9]** Fewer Craft Responders

The proposed emergency plan reduces the number of Electricians from two (2) to (1) and the number of Mechanics from (2) to one (1) for the Repair Team Activities function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Repair Team Activities function from five (5) to three (3).

This change deviates from the current emergency plan minimum staff ERO position requirements.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

A minimum number of maintenance personnel should respond to an event as part of the ERO, with more personnel available on an as-needed basis depending on the event. The augmentation (support) of the electrician and mechanic positions should occur within 60-minutes of an Alert ECL, (or greater), and is typically staffed in the OSC. The augmentation (support) of the I&C position should occur within 90-minutes of an Alert ECL, or greater, and is typically staffed in the OSC.

Maintenance personnel are not assigned specific ERO response tasks in the proposed emergency plan. Maintenance personnel designated as minimum augmenting ERO are used as needed for skill of craft tasks.

Staffing for events which involve extensive damage has been analyzed in accordance with NEI 12-01 and are addressed under FLEX requirements.

This change is consistent with the staffing plan of NUREG-0654 R2.

### 2.1.10 [Potential RIE 1-10] No IT Technician ERO Positions

The proposed emergency plan does not assign IT Technicians in the TSC and EOF/JIC. Specifically, this change reduces the number of IT Technicians minimum staff ERO positions used for the Information Technology function from two (2) to zero (0).

This change deviates from the NUREG-0654 R2 minimum staff ERO guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

Advances in technology have led to significant enhancements in many areas of emergency response, such as communications, monitoring, displays, digital procedures, etc. Licensees should consider the use of this technology whenever it enhances their ability to protect the health and safety of the public. However, if the implementation of the emergency plan is so reliant on this technology that without it, the emergency plan could not be implemented, then an IT Lead should augment (support) the response within 60-minutes of an Alert ECL, or greater, if the TSC/OSC has this technology; and within 60-minutes of an SAE ECL, or greater, if the EOF or JIC/JIS has this technology. If the licensee has capable backup plans for if/when this technology fails, then this function is not necessary. In other words, if the ERO is reliant upon technology such that its loss would prevent the ERO from functioning. then a support position should be part of the ERO to assist in recovery of this technology. If the loss of this technology would lead to the implementation of backup strategies, then this position would not need to be part of the ERO and can be called upon as-needed. Licensees should consider using the listing of critical digital assets, identified in accordance with 10 CFR 73.54, as the basis for determining if this position should be considered part of the EROs augmented response.

Per NUREG-0654 R2, minimum staff ERO IT positions are only required to be described in the emergency plan if critical digital assets (CDAs) are identified per 10 CFR 73.54, Protection of digital computer and communication systems and networks. The proposed emergency plan relies on DCS/ERDADS for monitoring plant parameters, which has been determined to be a CDA. The IT process for addressing issues with CDAs operates full time outside the emergency plan on a 24/7 basis. Additionally, NextEra maintains an IT Help Desk 24 hours per day, 7 days a week. Many computer issues are addressed remotely with an IT specialist through the Help Desk.

Each of the EP related digital assets were evaluated as part of implementation of the Cyber Security Rule, 10 CFR 73.54(b). Under NEI 13-10, "Cyber Security Control Assessments," EP Critical Digital Assets have been assessed and controls have been put in place to protect the assets against cyber-attack. In conjunction with these controls, alternate administrative, non-digital, or adequately independent means have been put in place for performing each EP function, should the digital component or program fail.

Performance of digital equipment used by EP has shown to be acceptable during drills and exercises, and through routine inventory and surveillance checks. Performance of digital assets is monitored through either the Corrective Action Program (CAP) or the drill and exercise critique process. Performance trends are monitored, corrective actions are issued, and compensatory measures are taken as necessary.

With the IT department process for 24/7 coverage and built-in redundancy for communication systems and digital EP assets, NextEra has identified that there is no need to maintain an IT Technicians as minimum staff ERO positions.

## 2.2 ERO Augmentation Analysis

**Note:** Discussion around the technology Emergency Response Notification for Incidents and Events (ERNIE) are written in the future present tense throughout this document. The system is not installed at this facility currently but will be as part of the installation of the Common Emergency Plan.

The ERO Augmentation Analysis compares and evaluates the current emergency plan on-shift and minimum staff ERO positions against those in the proposed emergency plan and in NUREG-0654 R2 guidance. Augmentation deviations in the proposed emergency plan from the current emergency plan and NUREG-0654 R2 are categorized as potential RIEs and evaluated to determine whether the timeliness to perform the function is sustained without overburden of the on-shift staff.

Refer to Attachment 1, ERO Staffing Plan Comparison Table, for a side-by-side summary of staffing and augmentation comparison between NUREG-0654 R2 Table B-1, the current emergency plan, and the proposed emergency plan.

NUREG-0654 R2 establishes 60 and 90-minute minimum staff ERO augmentation time requirements for the TSC and OSC positions at the Alert emergency classification level; and a 60-minute minimum staff ERO augmentation time requirement for the EOF at the Site Area Emergency classification level.

The current emergency plan follows a 30 / 60-minute augmentation scheme as approved by the NRC in 1981 with the following main elements:

- All ERO personnel are notified at the Unusual Event emergency classification level (response to facilities is elective for the Shift Manager) and called out to respond to their assigned facility at the Alert emergency classification level.
- The TSC and OSC are required to be activated at the Alert emergency classification level.
- The EOF is required to be activated at the Site Area Emergency classification level.
- The JIC is activated as soon as possible at an Alert or higher emergency classification level when determined appropriate with the offsite agencies, and whenever the EOF is activated.

The proposed emergency plan follows a 60 and 90-minute augmentation scheme with the following main elements:

- All ERO personnel are notified at the Unusual Event emergency classification level (response to facilities is elective for the Shift Manager) and called out to respond to their assigned facility at the Alert emergency classification level.
- The TSC, OSC, and EOF are activated at the Alert emergency classification level.
- NextEra implements JIS practices that are capable of performing the media information function at all emergency classification levels.
- The near-site JIC is activated when determined appropriate with the offsite agencies (at an Alert or higher emergency classification level).

The ERO Augmentation Analysis concludes that the differences in times between the proposed common emergency plan 60 and 90 minute response criteria and the NUREG-0654 R2 60 and 90 minute response criteria does not adversely delay turnover of responsibilities or negatively impact/overburden the ability of the on-shift personnel to perform operational actions or key functions. This alternate staffing approach continues to maintain initial facility accident response in all key functional areas at all times and provides timely augmentation of response capabilities.

# 2.2.1 [Potential RIE 2-1] Site Emergency Director at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time for the Site Emergency Director minimum staff ERO position that performs the Command and Control function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

This function is typically assigned to the Operations Shift Manager (OSM). The augmentation (relief) of this position is intended to relieve the OSM of EP functions so that the OSM can focus on the event response from an operations perspective. This should occur within 60-minutes of an Alert ECL declaration, or greater, and is typically a position staffed within the TSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Per the guidance in NUREG-0654, Table B-1, an augmented "Senior Manager" should fulfill the "Emergency Operations Facility Director" major task at 60 minutes. A licensee requesting a change in staff augmentation requirements that would have the lead manager unavailable to assume command and control within 60 minutes of the initial emergency declaration should show that the on-shift staff includes enough qualified supervision such that one supervisor will assume the emergency director role. The licensee should show that the on-shift supervisor performing the manager actions will not have any additional duties (e.g., each unit under the direction of a unit supervisor, a shift manager providing oversight of the plant response, and a designated emergency director responsible for emergency plan implementation).

The Shift Manager is given overall command and control with regard to ERO response activities. The position is used to perform Emergency Classification Level (ECL) determinations and develop Protective Action Recommendations (PARs), and to direct or perform ORO notification.

Historically, actual events have resulted in single ECL declarations with no further escalation. Realistic event progression that challenges multiple fission product barriers is relatively slow as demonstrated by the events at TMI and Fukushima. In this case,

immediate plant operations and ERO response actions occur with 60 minutes of actual events and the on-shift staff are not burdened (tested) with multiple classifications.

Planning for a wide range of events, including rapidly progressing severe accidents (RPSA) is also required. These "fast breaker" events rise to the SAE or GE classification level without progressing through the lower ECLs. In this case, immediate plant operations and ERO response actions occur with 60 minutes of the RPSA scenario, and the on-shift staff are not burdened (tested) with multiple classifications.

Event scenarios that require escalation of the ECL prior to ERO augmentation are included in drills and exercises for the on-shift ERO. Technology and process enhancements including communications (ERNIE), ERDS, EAL matrix, PAR flowchart, etc. have reduced the time and attention it takes to perform tasks along with enhancing the effectiveness and efficiency of task performance. In addition, NUREG-0654 R2 has added a Classification Advisor position to assist and work in coordination with the Shift Manager, which NextEra has included as a collateral duty in the on-shift complement.

All Initiating Conditions (ICs) need to be demonstrated within the 8-year cycle. All Unusual Event and Alert level ICs are preformed from the Control Room. Thus, the opportunities for the Shift Manager to demonstrate the ability to perform emergency and operations responsibilities are provided multiple times over the 8-year cycle.

The demonstration and evaluation of the Shift Manager to perform their emergency plan functions is continuously evaluated during emergency planning drills/exercises and operations training simulator sessions. Various scenarios are used to evaluate the Shift Manager's ability to perform the following emergency planning functions, technical specification responsibilities and operations oversight.

Operations training simulator sessions test and evaluate the Shift Manager's ability to effectively and efficiently perform all required functions / responsibilities until the event is stabilized (session is complete); this in some circumstances is greater than the 90 minutes ERO response time. Note – there is no minimum required length of time for the training sessions.

Licensed Operator Continuing (LOR) training periodically has scenarios that extend to 90 minutes without augmented ERO involvement. For example, a training scenario is performed on a periodic basis to ensure that a FLEX Beyond Design Basis External Event can be mitigated by the minimum on-shift staff. The FLEX scenario assumes that the ERO will not be on site to provide support for a minimum of 6 hours. While this is covered under 10 CFR 50.155 and not Appendix E, the example is given as a major event where augmented ERO response is not provided while the site compliment is under heavy demand for action to mitigate the event.

NextEra Energy has added a drill/exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for at least 90 minutes. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

The Site Emergency Director 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the Command and Control function.

On Shift impact of change from 60 to 90 minutes: The shift manager oversees site response until relieved. As outlined above, the Shift Manager is in oversight role of the plant operations at this point so any additional classifications or PAR decision making from degrading equipment is not an additional burden.

Due to the Shift Managers and Site Emergency Directors having the similar qualifications and similar backgrounds, the skillsets that the Site Emergency Directors bring with them are similar to those of the Shift Manager.

The (Emergency) Classification Advisor role on shift is also able to perform better as the principal assistant to the Shift Manager due to technological improvements outlined in their section below.

One function that the ERO may take on is the non-critical communications with offsite agency leadership if an event is in progress. These communications are predominantly clarification questions that take 1-3 minutes to answer as their ERO yet in place. This does not add a significant additional burden on the Shift Manager.

When the Site Emergency Director (SED) assumes command and control, the SED routinely involve the Shift Manager in all classification and PAR decision making for validation so the additional burden of stating the classification as it is coming from the SM vice from the TSC would not result in an overburden.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

## 2.2.2 [Potential RIE 2-2] Classification Advisor at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC Classification Advisor minimum staff ERO position that performs the Emergency Classifications function.

This change deviates from the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC.

Maintaining the ability to perform this function at all times ensures that ECL decisions, and as applicable, the PAR decisions, are timely and accurate as these decisions have a direct relationship to public health and safety from the consequences of a radiological event. This function shall work in coordination with the OSM, or Emergency Coordinator, depending on which position is in command and control, and as a result should be available on shift and in the TSC.

The on-shift Classification Advisor is given a limited role with regard to ERO response activities. The position is used to second check Emergency Classification Level (ECL) determinations and Protective Action Recommendations (PARs) developed by the Shift Manager, and to support ORO notification information accuracy. The on-shift Classification Advisor has received training to perform their assigned EP functions and assist the Shift Manager with emergency responsibilities.

Historically, actual events have resulted in single ECL declarations with no further escalation. Realistic event progression that challenges multiple fission product barriers is relatively slow as demonstrated by the events at TMI and Fukushima. In this case, immediate plant operations and ERO response actions occur with 60 minutes of actual events and the on-shift staff are not burdened (tested) with multiple classifications.

Planning for a wide range of events, including rapidly progressing severe accidents (RPSA) is also required. These "fast breaker" events rise to the SAE or GE classification level without progressing through the lower ECLs. In this case, immediate plant operations and ERO response actions occur with 60 minutes of the RPSA scenario, and the on-shift staff are not burdened (tested) with multiple classifications.

Event scenarios that require escalation of the ECL prior to ERO augmentation are included in drills and exercises for the on-shift ERO. Technology, process and procedure enhancements to classification, notification and PAR development (such as Emergency Response Notification for Incidents and Events (ERNIE), ERDS, EAL matrix, PAR flowcharts, etc.) have simplified response activities and enhanced the effectiveness and efficiency of task performance. The on-shift Classification Advisor position's ability to perform second checks specifically benefits from these advancements such that continuation of their ERO related tasks from 60 to 90 minutes is not a burden.

All Initiating Conditions (ICs) need to be demonstrated within the 8-year cycle. All Unusual Event and Alert level ICs are preformed from the Control Room. Thus, the opportunities for the on-shift Classification Advisor to demonstrate the ability to perform emergency and operations responsibilities are provided multiple times over the 8-year cycle.

The demonstration and evaluation of the on-shift Classification Advisor to perform their emergency plan functions is continuously evaluated during emergency planning drills/exercises and operations training simulator sessions. Various scenarios are used to evaluate the on-shift Classification Advisor's ability to perform the following emergency planning functions, technical specification responsibilities and operations oversight.

Operations training simulator sessions test and evaluate the on-shift Classification Advisor's ability to effectively and efficiently perform all required functions / responsibilities until the event is stabilized (session is complete); this in some circumstances is greater than the 90 minutes ERO response time. Note – there is no minimum required length of time for the training sessions.

Licensed Operator Continuing (LOR) training periodically has scenarios that extend to 90 minutes without augmented ERO involvement. For example, a training scenario is performed on a periodic basis to ensure that a FLEX Beyond Design Basis External Event can be mitigated by the minimum on-shift staff. The FLEX scenario assumes that the ERO will not be on site to provide support for a minimum of 6 hours. While this is covered under 10 CFR 50.155 and not Appendix E, the example is given as a major event where augmented ERO response is not provided while the site compliment is under heavy demand for action to mitigate the event.

NextEra Energy has added a drill/exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the

augmenting ERO for at least 90 minutes. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement for the TSC Classification Advisor minimum staff ERO position does not impact the capability or timeliness to perform the Emergency Classifications function or overburden the on-shift position.

On Shift impact of change from 60 to 90 minutes: The ECA position is the principal support to the Shift Manager or Site ED, depending on their location. The delay of the ECA arrival by an additional 30 minutes will have the Shift ECA performing the remote coordination support and ERNIE communications for the additional time. These functions are part and parcel to their function and practiced regularly.

The (Emergency) Classification Advisor role on shift as the principal assistant to the Shift Manager is enhanced due to technological improvements outlined above.

With the technological advances that ERNIE has given to the ECA, they are more able to provide co-equal level of knowledge and skill assistance to the Shift Manager for longer time periods due to them not being saddled with manual tasks of creating forms, briefing the shift communicator on the specific forms, and activating the ERO.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

### 2.2.3 **[Potential RIE 2-3]** ORO Communicator at 90 Minutes

The proposed emergency plan adds 60 minutes (30 for NUREG-0654 guidance) to the augmentation response time to the TSC ORO Communicator minimum staff ERO position that performs the State/County notifications aspect of the Communications function.

This change deviates from the current emergency plan 30-minute ERO response time requirements and NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this position should occur within 60-minutes of an Alert ECL, or greater, and is intended to relieve the on-shift staff of this EP function. This function should consist of 2 staff members to fulfill the communication needs, at a

minimum: 1 for the NRC and 1 for ORO notification and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

To adequately support the elimination or extension of the two 60-minute responders, the licensee should show that two on-shift positions are identified to fill the 60-minute responder's role to "Notify licensee, State, local and Federal personnel [and] maintain communication." The licensee should show that these positions are not assigned other tasks that may prevent the timely performance of their assigned notification or communication functions, as specified in the emergency plan. The licensee should discuss how communication technologies employed by the proposed on-shift staff will support timely, effective, and reliable notifications. Additionally, the communications technologies should be referenced in the emergency plan to ensure that future changes are reviewed using the RG 1.219 change process, as they were used as the basis for the proposed change.

Technology advancements of Emergency Response Notification for Incidents and Events (ERNIE) allows a streamlined process for ERO notification and ORO notification. Specifically, the technology advancements have enhanced initial notification to the ORO by using an electronic system that contacts the ORO warning points and emergency management staff via email, text and verbal computer-generated voice communications, thus eliminating the need for a communicator to perform the verbal portion of the initial notification.

ORO activation occurs from the site's warning points based upon the initial notification form information. The forms are negotiated and approved with OROs to provide information needed to make initial response decisions. As such, there should be minimal need for OROs to request additional information from the site communicators. ERNIE provides the site with validation that the information has been received by the OROs.

If any of the OROs need additional information prior to ERO activation (90 minutes), the NextEra control rooms are equipped with speaker and/or headset phones which aid them in the performance of the communication function. The technical advancement allows personnel to perform the communication task without negatively impacting the performance of other emergency plan or operations responsibilities.

NextEra Energy has added a drill/ exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for 90 minutes as a verification that the shift can perform their function with no assistance. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the State/County notifications aspect of the Communications function. The OROs concur with the NextEra Common Emergency Plan changes including the 90-minute ERO augmentation (refer to Enclosure 10).

On Shift impact of change from 60 to 90 minutes: The ORO communicator envisioned by NUREG-0654 R2 Table B1 was a manual intense process of reading off of paper notification forms and using one of many site telephone systems for external communications during the notification phase of an event. Additional functions would be communicating with state/county Emergency Operations Center staff to provide updates. As the (Emergency) Classification Advisor is responsible for ERNIE operations, they have taken on the below functions (via technology) of the ORO communicator:

- 1. ORO warning point call providing the warning point operators with information from the state/county notification form
- 2. Verification of message receipt.
- 3. Distribution of the notification form, usually by fax, to other ERO facilities and ORO warning points/EOCs

The offsite agencies receive annual training on EAL changes, so they know the basics of what the EALs are and what is on the notification forms.

One function that the ERO may take on is the non-critical communications with offsite agency leadership if an event is in progress. These communications are predominantly clarification questions that take 1-3 minutes to answer as their ERO yet in place. This does not add any significant burden on the shift staff. The timing of ORO response matches similarly to the site ERO response of 90 minutes. Each of the agencies have agreed to our 90 minute ERO response time as shown with the letters of support as part of the submittal.

If the offsite agency needs additional information, as discussed above, the control room can provide the information that is needed with minimum burden to the on-shift staff.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

### 2.2.4 [Potential RIE 2-4] ENS Communicator at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC ENS Communicator minimum staff ERO position that performs the NRC notifications aspect of the Communications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this position should occur within 60-minutes of an Alert ECL, or greater, and is intended to relieve the on-shift staff of this EP function. This function should consist of 2 staff members to fulfill the communication needs, at a minimum: 1 for the NRC and 1 for ORO notification and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

To adequately support the elimination or extension of the two 60-minute responders, the licensee should show that two on-shift positions are identified to fill the 60-minute responder's role to "Notify licensee, State, local and Federal personnel [and] maintain communication." The licensee should show that these positions are not assigned other tasks that may prevent the timely performance of their assigned notification or communication functions, as specified in the emergency plan. The licensee should discuss how communication technologies employed by the proposed on-shift staff will support timely, effective, and reliable notifications. Additionally, the communications technologies should be referenced in the emergency plan to ensure that future changes are reviewed using the RG 1.219 change process, as they were used as the basis for the proposed change.

Technology advancements using continuous live ERDS transmission and Emergency Response Notification for Incidents and Events (ERNIE) allows a streamlined process for NRC notification. Specifically, the technology advancements have enhanced the NRC Headquarters Operations Office (HOO) initial notification by using an electronic system that contacts the HOO.

The shift communicator is able to communicate immediately, not to exceed 1 hour, with the NRC HOO to provide real time information and an open line if desired. The NextEra control rooms are equipped with speaker and/or headset phones which aid the shift communicator in the performance of the communication function. The technical advancement allows personnel to perform the communication task without negatively impacting the performance of other emergency plan or operations responsibilities.

This technology allows for a single communicator to perform as the NRC communicator and have collateral duties throughout the additional 30 minutes until relieved by the TSC ENS Communicator.

NextEra Energy has added a drill/exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for 90 minutes as a verification that the shift can perform their function with no assistance. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the NRC notifications aspect of the Communications function.

On Shift impact of change from 60 to 90 minutes: The shift communicator role is primarily responsible for communicating with the NRC in the NEE designed scheme. ORO communications are handled by ERNIE (technology) and the ECA as outlined above in this document.

The shift communicator will then follow up with the NRC (after ERNIE delivers the first message electronically) immediately (not to exceed) 1 hour to validate receipt of the information, answer and answer any additional questions. The communicator will be available on the open line with the NRC as they are in the process of determining their response model to the event. The shift communicator being on the open line with the NRC for an additional 30 minutes will prevent them from being added back into the response pool; this delay was validated during the staffing study as the communicator was used in their task for 120 minutes. All other shift staff were capable of responding with no delays.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

## 2.2.5 [Potential RIE 2-5] TSC RP Coordinator at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC RP Coordinator minimum staff ERO position that performs the Supervision of Radiation Protection Staff and Site Radiation Protection function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

This function is important for effective emergency response to a radiological event because the management of RP resources, and the assistance this position provides the Emergency Coordinator, is crucial for response to radiological events. Radiological events can be very significant and constantly evolving, and require significant expertise in radiation and radiological consequences. The evaluation of radiological events, and the development of effective protective action recommendations, requires this expertise to support the Emergency Coordinator in making these decisions. This position is also responsible for the direction and protection of FMTs. The augmentation (relief) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC.

The TSC Radiation Protection Coordinator relieves the Shift Manager of the Supervision of Radiation Protection Staff and Site Radiation Protection function.

On-shift radiation protection personnel respond to abnormal radiological conditions, including Area Radiation Monitor and Process Radiation Monitor alarms, in accordance

with RP procedures and report their actions and information to the Shift Manager, with little or no required supervision. Other on-shift radiation protection personnel emergency functions/responsibilities are performed without the need for direct supervision of the Shift Manager.

Technology and process enhancements in radiation protection including dosimetry and personnel monitoring have reduced the on-shift RP task burden by allowing operations and other non-RP shift personnel to perform most activities without the need for dedicated RP coverage. Thus, the need for the Shift Manager to coordinate RP coverage activities is significantly reduced.

The 90-minute response for OSC maintenance and radiation protection personnel credits the enhancement of the NextEra FLEX equipment and strategies. By accounting for FLEX equipment and strategies that eliminate or prolong the onset of core damage and any radiological release of activity the RP challenges are simplified and the need for a 60 minute radiation protection personnel response, and thus a 60 minute Radiation Protection Supervision response is diminished. Coordination of RP supervision response time with full TSC and OSC augmentation provides for a less complicated transition of responsibilities.

NextEra Energy has added a drill/ exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for 90 minutes as a verification that the shift can perform their function with no assistance. This includes the Shift Manager directing and supervising RP functions and activities.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the Supervision of Radiation Protection Staff and Site Radiation Protection function.

On Shift impact of change from 60 to 90 minutes: The Shift Manager is overall responsible for the supervision of RP staff and site radiation protection function.

With the Site RP Coordinator filling both Table B1 roles of Site RP Coordinator and OSC RP Supervisor, this position has responsibility of providing direction to RP staff and will thus be filled with dayshift RP management, supervisors, analysts, and staff.

While these personnel do bring a skillset that is matched only by the RPT on shift, they do provide additional knowledge and experience that the shift manager may not have in their arsenal. To mitigate this issue, throughout the years emergency operations procedures have been enhanced by incorporation of the most recent revisions of PWR Owner's Group guidance, this has greatly aided the shift RP response to include specific direction on directing surveys and other RP functions. The AOP/EOP procedure sets have specific guidance for direction and control of RP/QI resources during an event. The shift manager has the authority to provide immediate dose extensions for life saving, facility saving, or prevention/mitigation of release. This decision is informed by the rest of the operating crew and procedure sets. This again is part and parcel of the SM requirements and is not an undue burden for the additional 30 minutes.

Performing a comparative task analysis (refer to Analysis 1) between the Shift Manager and the Site RP Coordinator, the tasks are same/ similar between the SM and SRPC. Where there is a gap is with experience. Experience cannot be mitigated with training as the knowledge requirements for the positions are same/ similar. Experience is mitigated through procedure use and adherence. As outlined above, all NEE sites have AOP/EOP sets that are based off most recent PWR Owner's guidance which incorporates industry best practices, including RP direction.

### 2.2.6 [Potential RIE 2-6] Dose Assessors at 60 and 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the Dose Assessor minimum staff ERO positions that perform the Dose Assessments / Projections function.

This change deviates from the current emergency plan 30-minute ERO response time requirements.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC. For an SAE ECL, or greater, this. position should be staffed in the EOF as the EOF is primarily intended to coordinate with offsite response officials when developing protective action strategies for the public.

Maintaining the ability to perform dose assessments/projections at all times ensures that the consequences of a radiological event, to the public, are effectively mitigated by providing timely dose related information to the Emergency Coordinator (TSC) or Emergency Director (EOF) depending on which position is in command and control. As a result, this position (function) is expected to be available on shift, in the TSC, and in the EOF depending on the ECL declared.

The Remote Dose Assessor will relieve the on-shift Dose Assessor within 60 minutes of event declaration of an Alert or higher emergency classification level. The EOF Dose Assessor is available to perform their dose assessment functions within 90 minutes of event declaration of an Alert or higher emergency classification level.

Additionally, personnel qualified as on-shift Dose Assessors are trained in dose assessment for all NextEra sites such that an unaffected site shift Dose Assessor could be called upon to support dose assessment activities at an affected unit prior to ERO activation.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

The proposed emergency plan conforms to the NUREG-0654 R2 augmentation response time criteria for the Dose Assessments / Projections function.

### 2.2.7 [Potential RIE 2-7] Radiation Protection Personnel at 90 Minutes

The proposed emergency plan adds 60 minutes (30 for NUREG-0654 guidance) to the augmentation response time to the radiation protection personnel minimum staff ERO positions that perform the Radiation Protection function.

This change deviates from the current emergency plan 30-minute ERO response time requirement and NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for augmenting radiation protection personnel states that:

While not all Alert ECLs (or lower) have radiological consequences, licensees should develop their ERO staffing plans for a worst-case scenario from a radiological risk perspective, i.e., an event which results in the immediate (within 60-minutes) loss of 2 or more fission product barriers leading to significant and unknown radiological conditions. The augmentation (support) of this position should occur in two stages: within 60 minutes of an Alert ECL or greater, 3 additional qualified RP staff should be available, and within 90 minutes of an Alert ECL, or greater, an additional 3 additional qualified RP staff should be available, and both are typically staffed in the OSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Radiation protection personnel perform multiple roles during normal and emergency plant operations. These roles include access control, personnel monitoring, and dosimetry, in addition to HP coverage for repair and corrective actions, search and rescue, first aid, and firefighting during emergency response operations. Per the guidance in Table B-1 of NUREG-0654, there should be two augmented responders at 60 minutes for the major task of "Radiation Protection." To adequately support an extension in response timing of the two radiation protection 60-minute responders to 90 minutes, the licensee should show that the on-shift HP staffing includes as a minimum, four HP technicians in total for the site. The extra HP technicians are needed for in-plant protective actions for the other personnel added to the on-shift staffing to compensate for the extension in augmentation time, and to assess any offsite releases of radioactive materials. Additionally, the licensee request should demonstrate that on-shift HP technicians will be relieved of the need to perform access control, personnel monitoring, and dosimetry-related tasks, thereby freeing these personnel to cover vital response activities (e.g., HP coverage for repair and corrective actions, search and rescue, first aid, and firefighting). NRC staff will

consider whether the basis for the justification includes the availability of installed area, process, airborne and effluent radiation monitors, automated systems and information technology solutions, and enhanced work processes. The licensee should include supporting tools and processes that will be considered such as portal monitors, self-alarming dosimeters, and automated access control systems for the RCA that maintain active radiation work permits that are readily available if an emergency is declared (e.g., the system verifies qualifications, dose margins, and access requirement).

Three (3) RP Technician and two (2) RP Qualified Individual 90-minute minimum staff ERO positions report to the Lead OSC Supervisor and provide radiation protection support.

Through equipment, process, and training enhancements the on-shift staff can initially respond to Design Basis and Beyond Design Basis (BDB) events without the support of an augmented ERO. As codified by 10 CFR 50.155, NextEra FLEX equipment provides the on-shift staff with additional resources when installed plant equipment is lost or damaged. Generally, FLEX provides portable backup equipment onsite that can be used to supplement or replace installed plant equipment in maintaining long-term core cooling, spent fuel cooling, and containment integrity. Movement of FLEX equipment, including installation into plant systems and its operations (electrical, fluid, etc.) is performed by on-shift personnel.

Due to the availability of FLEX equipment, NextEra stations have diverse protection against loss of ECCS capability and other systems, which provides a basis for determination that no immediate ECCS repair and corrective actions are likely necessary for on-shift personnel prior to augmentation of maintenance personnel. The FLEX/BDB process and equipment, and the operating emergency procedures (EOP, AOP, etc.) are designed to be implemented with the minimum shift staff. By accounting for FLEX equipment and strategies that eliminate or prolong the onset of core damage and any radiological release of activity the RP challenges are simplified and the need for a 60 minute radiation protection personnel response is diminished.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

On Shift impact of change from 60 to 90 minutes: Shift RP functions are designed around requirements in AOP/EOP procedures and validated against FLEX demands. With the RP/QI personnel on shift, this allows for multiple shift "teams" working in the Radiologically Controlled Area performing steps needed in the AOP/EOP procedures. Changing radiological conditions are an integral part of operations functions in these procedure sets and the operators are trained to expect those conditions as they are realigning systems. As the RP/QIs are matched with the number of teams needed for response, having those personnel continue performing that function without additional RP response is appropriate.

ERO RP response is going to be focused on ERO responders – which is what they are staffed based on. Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

## 2.2.8 [Potential RIE 2-8] Both Offsite FMTs at 90 Minutes

The proposed emergency plan adds 60 minutes (30 for NUREG-0654 guidance) to the Field Monitoring Team minimum staff ERO positions that performs the offsite field monitoring aspect of the Field Monitoring Teams function.

This change deviates from the current emergency plan 30-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

- An offsite FMT should be staffed, consisting of a monitor and a driver. This offsite FMT is responsible for locating, monitoring, and tracking a radioactive plume, as well as obtaining environmental samples as necessary (air, water, vegetation, etc.). This team should be staffed within 60-minutes of an Alert ECL, or greater, in order to be ready to respond to a radiological release, or to detect radiation in the field thus confirming and quantifying the release. This supports the applicable PAR decisionmakers in developing effective PARs.
  - i. The monitor should be qualified to assess radiation and contamination levels, but need not be an ANSI qualified RP Technician as long as the FMT is under the direct supervision of senior staff in the TSC or EOF.
  - iii. The driver should be knowledgeable about the vehicle and the proposed routes to be traversed.
- Another offsite FMT should be staffed, consisting of a monitor and a driver. This offsite FMT is also responsible for locating, monitoring, and tracking a radioactive plume, as well as obtaining environmental samples (air, water, vegetation, etc.). This team should be staffed within 90-minutes of an Alert ECL, or greater, in order to be ready to respond to a radiological release, or to detect radiation in the field thus confirming and quantifying the release. This supports the applicable PAR decision-makers in developing effective PARs. An additional 30-minutes in response is acceptable in that this second FMT is a backup to the first FMT, and while both FMTs are expected to respond to an event to better coordinate radioactive plume tracking action(s), allowing for an additional 30-minutes provides licensees some flexibility in staffing this ERO function without compromising the reasonable assurance finding in accordance with 10 CFR 50.47(a).

- i. The monitor should be qualified to assess radiation and contamination levels, but need not be an ANSI qualified RP Technician as long as the FMT is under the direct supervision of senior staff in the TSC or EOF.
- iii. The driver should be knowledgeable about the vehicle and the proposed routes to be traversed.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Per the guidance of NUREG-0654, Table B-1, there should be four augmented responders at 60 minutes—two for off-site surveys, one for on-site surveys, and one for in-plant surveys. To adequately support an extension of these responders to 90 minutes, the licensee should show that the on-shift HP staffing includes a minimum of four HP technicians in total for the site. The licensee should demonstrate that two HP technicians, in excess of the number evaluated previously for extending the 30-minute responders, are available for in-plant protective actions for the other maintenance personnel that need to be added to the on-shift staffing to compensate for the extension in augmentation time for the major task of "Repair and Corrective Actions," and to perform surveys to assess any off-site release of radioactive materials.

NextEra off-site Field Monitoring Team augmentation is 90 minutes for both teams versus one team at 60 minutes and one team at 90 minutes.

FLEX equipment and strategies eliminate or prolong the onset of core damage and any radiological release of activity, and thus simplify the RP challenges and diminish the need for a 60 minute Field Monitoring Team response.

The 60 minute response basis for the first off-site Field Monitoring Team is to be ready to respond to a radiological release, or to detect radiation in the field for any ECL at an Alert or above. NextEra provides dedicated vehicles and equipment to facilitate the rapid deployment of personnel upon their arrival.

- Vehicles are maintained and fueled such that the Field Monitoring Team Driver is only required to perform a quick walk-around safety check before operating.
- Equipment/supply kit inventories are administratively maintained so that Field Monitoring Team personnel are not required to verify contents or perform lengthy equipment checks.
- Vehicles and equipment are stored together in a location that facilitates rapid deployment outside the Protected Area.
- Initial Field Monitoring Team deployment strategy locates personnel in downwind areas near the site boundary prior to a release that promptly supports EAL identification and PAR determination.

This pre-staging and readiness of Field Monitoring Team resources significantly reduces the time it takes personnel to be ready to respond to and identify a radiological release, thus also facilitating a 90 versus 60 minute augmentation response time.

On Shift impact of change from 60 to 90 minutes: FMT function not being available for offsite response at 60 minutes is covered by NEI 99-01 revision 6 EALs that incorporate "Table R-1" values, which are pre-calculated effluent monitor readings that equate to worse case release value that allows for the shift to make a determination without the need for dose assessment or FMTs.

Unmonitored releases are evaluated using in plant area radiation monitors and plant physical responses (containment pressure erratic indications, flow rates not as expected, etc.) which would trigger the operating crew to look for leaks. Direct radiation monitor readings of the unmonitored release, if needed, would be completed by competent operations staff or RP staff. On the surface this may look like an additional function on the shift staff; however, it is standard operations response to look for leaks and abnormalities as events unfold to ensure that they are in the appropriate response procedures.

Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

## 2.2.9 [Potential RIE 2-9] Reactor Engineer at 60 minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the Reactor Engineer minimum staff ERO position that performs the Engineering function.

This change deviates from the current emergency plan 30-minute ERO response time requirement.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO guidance states that:

The augmentation (relief) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC ....

An engineer to provide expertise in electrical/instrumentation and control (I&C) systems and equipment supports the evaluation of these systems/equipment and supports the development of repair plans if necessary. The augmentation (support) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC....

An engineer to provide expertise in mechanical systems and equipment supports the evaluation of these systems/equipment and supports the development of repair plans if necessary. The augmentation (support) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC....

The proposed emergency plan conforms to the NUREG-0654 R2 augmentation response time criteria for the Engineering function.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

## 2.2.10 [Potential RIE 2-10] OSC Supervisors at 90 minutes

The proposed emergency plan adds 30 minutes to the augmentation response time for the Lead OSC Supervisor and FIN Supervisor minimum staff ERO position that performs the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan 60-minute ERO response time requirement for the OSC Manager and OSC Supervisor, and the NUREG-0654 R2 60-minute ERO response time guidance for the Lead OSC Supervisor.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

An Electrical Supervisor, a Mechanical Supervisor, an I&C Supervisor, and an RP Supervisor should be staffed within 90-minutes of an SAE ECL, or greater, and is typically staffed in the OSC. The OSC Supervisor can effectively manage the maintenance resources for the additional 30-minutes prior to the specific craft (mechanical, electrical, or I&C) respond, as demonstrated through drills and exercises, without compromising the staff's reasonable assurance finding in accordance with 10 CFR 50.47(a).

### FIN Supervisor

Moving the FIN Supervisor from 60 minutes (current emergency plan) to 90 minutes (proposed emergency plan) conforms to NUREG-0654 R2.

### Lead OSC Supervisor

Operations staff are currently trained with basic troubleshooting skills for support of all EOP and abnormal response procedure actions. Supervision of these actions are performed by the Shift Manager and Unit Supervisors regardless of augmented ERO staffing. There is no need for the ERO to relieve the shift of this responsibility.

The Flex/B.5.b process and equipment, and the operating emergency procedures (EOP, AOP, etc.), are designed to be implemented by the minimum on-shift staff. Through technological and process enhancements, the on-shift staff can cope with an event (Design Basis and Beyond Design Basis) initially without an ERO as analyzed in detail for other non-EP regulatory requirements. With FLEX/B.5.b processes and equipment codified by 10 CFR 50.155 into plant response procedures, on-shift personnel have the capability for mitigating core damage from design or beyond design basis events.

Based on this, OSC personnel are used primarily for repair activities, with operations personnel focusing on mitigating activities per the EOPs and other event procedures.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan for the Lead OSC Supervisor does not impact the capability or timeliness to perform the Supervision of Repair Team Activities function.

On Shift impact of change from 60 to 90 minutes: In NUREG 0654 revision 2 table B1, the Lead OSC Supervisor during the first 30 minutes of response is dedicated to identifying any craft maintenance needs and deploying them as required to get started on repair team needs. After that time, the Craft Supervision comes in to take over the planning of repair tasks.

As described above the OSC supervision is not necessary for the initial response, the on-shift staff have the capability of performing emergency maintenance functions – overriding Air operated/ motor operated valves due to recalcitrant valve actions, breaker opening/ closing, breaker resets, and taking channels out of service that are causing protection systems to function abnormally. These tasks are part of the standard operations function and are trained/ drilled regularly through continuing training programs. The shift manager is overall in charge of operations response as stated throughout this document and this function is no different. Most of these functions are procedurally directed or can be deduced from training/ experience and directed by the control room for response. Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no staffing requirements for particular skillsets to be present in this position. As such, there are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

## 2.2.11 [Potential RIE 2-11] OSC Craft at 90 minutes

The proposed emergency plan adds 30/60 minutes to the augmentation response time of OSC craft minimum staff ERO positions that perform the Repair Team Activities function.

This change deviates from the current emergency plan 30 and 60-minute ERO response time requirements and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

... a minimum number of maintenance personnel should respond to an event as part of the ERO, with more personnel available on an as-needed basis depending on the event. The augmentation (support) of the electrician and mechanic positions should occur within 60-minutes of an Alert ECL, (or greater), and is typically staffed in the OSC. The augmentation (support) of the I&C position should occur within 90-minutes of an Alert ECL, or greater, and is typically staffed in the OSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Table B-1 of NUREG-0654 calls for the addition of one "Mechanical Maintenance," one "Rad Waste Operator," and an added "Electrical Maintenance" person within 60 minutes. To adequately support an extension of the response time for these responders, the licensee should demonstrate that the responsibilities of these positions can be covered with on-shift staff or earlier responders.

Operations Emergency Operating Procedures have been developed to provide direction for a wide range of events described in the FSAR that uses operators to place the plant in a safe and stable condition. Maintenance personnel are not called upon in the response stage of an event as repair activities are taken after immediate EOP response actions.

Through equipment, process, and training enhancements the on-shift staff can initially respond to Design Basis and Beyond Design Basis (BDB) events without the support of an augmented ERO. As codified by 10 CFR 50.155, NextEra FLEX equipment provides the on-shift staff with additional resources when installed plant equipment is lost or damaged. Generally, FLEX provides portable backup equipment onsite that can be used to supplement or replace installed plant equipment in maintaining long-term core cooling, spent fuel cooling, and containment integrity. Movement of FLEX equipment, including installation into plant systems and its operations (electrical, fluid, etc.) is performed by on-shift personnel.

Due to the availability of FLEX equipment, NextEra stations have diverse protection against loss of ECCS capability and other systems, which provides a basis for determination that no immediate ECCS repair and corrective actions are likely necessary for on-shift personnel prior to augmentation of maintenance personnel. The FLEX/BDB process and equipment, and the operating emergency procedures (EOP, AOP, etc.) are designed to be implemented with the minimum shift staff. By accounting for FLEX equipment and strategies that eliminate or prolong the need for equipment and systems repair the maintenance challenges are simplified and the need for a 60 minute craft personnel response is diminished.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

On Shift impact of change from 60 to 90 minutes: In NUREG 0654, Rev. 2, Table B1, the craft function during the first 30 minutes of response is dedicated to identifying any craft maintenance needs and reporting that information to the Lead OSC Supervisor to develop priorities on repair team needs. After that time, the Craft Supervision comes in to take over the planning of repair tasks.

Shift operations staff have the capability of performing emergency maintenance functions – overriding Air operated/ motor operated valves due to recalcitrant valve actions, breaker opening/ closing, breaker resets, and taking channels out of service that are causing protection systems to function abnormally. These tasks are part of the standard operations function and are trained/ drilled regularly through continuing training programs. The shift manager is overall in charge of operations response as stated throughout this document and this function is no different. Most of these functions are procedurally directed or can be deduced from training/ experience and directed by the control room for response.

While the early identification of repair team needs will not be directly addressed by the field operations staff, the ability of the shift to perform emergency maintenance functions will identify which pieces of equipment are truly unavailable which will be reported to the Shift Manager and to the ERO through the SM/SED turnover process. Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

While there are skills in the OSC Mechanic and OSC Electrician that are not 100% present in shift staff – the skills required for the 60 to 90 minute gap are available on shift to perform emergency maintenance functions and identify equipment that is out of service.

### 2.2.12 [Potential RIE 2-12] Security Liaison at 90 minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the Security Liaison minimum staff ERO position that perform the Security function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The licensee's Security Force is controlled and maintained by the licensee's NRC-approved physical security plan and does not need to be reflected in the Emergency Plan. However, the establishment of a Security Liaison position in the TSC is advantageous to ensure effective coordination between the security force and the ERO, particularly for events where offsite resources are necessary as well as for security related events and site personnel accountability. The augmentation (support) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed by a Security Liaison in the TSC to coordinate security-related activities with that of the ERO.

The site-specific Physical Security Plan (PSP) defines on-shift security staffing. This PSP staffing supports initial event response, either security or emergency plan related. The Security Shift Supervisor communicates directly with the Shift Manager informing them of security related actions and conditions. This communication does not change with the augmentation of the ERO.

Following the transfer of command and control, the Security Liaison position coordinates security and emergency related communications and response actions between the Site Emergency Director and the security force. The Security Liaison position provides communication and coordination resources that are not needed until the TSC and OSC are augmented at the 90 minute point in time.

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On Shift impact of change from 60 to 90 minutes: As stated above, the PSP defines the on-shift security staff to support the initial response and the Security Liaison is not necessary until the TSC/OSC are staffed. Therefore, by aligning the Security Liaison's response time to the TSC/OSC, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by security shift staff in adjusting the response from 60 to 90 minutes.

#### 3.0 ERO KEY FUNCTION ANALYSIS

Each sub-section below lists the NUREG-0654 R2 Table B-1 tasks associated with the key function; and then provides, as applicable, a staffing comparison table, Emergency Plan Change Assessment section and NUREG-0654 R2 Alignment Assessment section for the on-shift and minimum staff ERO positions.

- The Emergency Plan Change Assessment section evaluates any difference in ERO staffing between the current emergency plan and the proposed emergency plan for the key function. It includes the basis for the original and proposed staffing and justification for the change as applicable. The ERO Task Analysis provides further detail and disposition of the tasks assigned to the ERO positions.
- The NUREG-0654 R2 Alignment Assessment section evaluates any difference in ERO staffing between NUREG-0654 R2 and the proposed emergency plan for the particular key function to determine conformance. It also states whether the tasks assigned to the ERO position are aligned with the tasks specified for the key function in NUREG-0654 R2.

## 3.1 Key Function: Command and Control

The Command and Control function includes the following NUREG-0654 R2 Table B-1 tasks:

- Provide overall ERO command and control.
- Approve emergency classification levels (ECL) and/or protective action recommendations (PAR).
- Authorize personnel dose extensions.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

## 3.1.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Shift Manager	(1) Shift Manager	(1) Operations Shift Manager

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Shift Manager to the Command and Control function.

The proposed emergency plan assigns one (1) Shift Manager to the Command and Control function.

No functional changes have been made to the on-shift ERO position for the Command and Control function.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Operations Shift Manager to the on-shift Command and Control function.

The proposed emergency plan assigns one (1) Shift Manager to the on-shift Command and Control function.

The proposed emergency plan on-shift ERO staffing level meets the NUREG-0654 R2 guidance for the Command and Control function.

## 3.1.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Emergency Coordinator	(1) Site Emergency Director	(1) Emergency Coordinator
(TSC)	(TSC)	(TSC at Alert or higher)
(1) Recovery Manager (EOF)	None	(1) Emergency Director (EOF
(1) Recovery Manager (EOF)	None	at SAE or higher)

## 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC Emergency Coordinator minimum staff ERO position at the Alert emergency classification level and one (1) EOF Recovery Manager minimum staff ERO position at the Site Area Emergency classification level to the Command and Control function.

The proposed emergency plan assigns one (1) Site Emergency Director minimum staff ERO position at the Alert emergency classification level to the Command and Control function.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC Emergency Coordinator minimum staff ERO position at the Alert emergency classification level and one (1) EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level to the Command and Control function.

The proposed emergency plan assigns one (1) Site Emergency Director minimum staff ERO position at the Alert emergency classification to the Command and Control function.

[Potential RIE 1-1] The proposed emergency plan does not assign an EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level for the Command and Control function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Command and Control function from two (2) to one (1).

This change deviates from the current emergency plan minimum staff ERO requirements and the NUREG-0654 R2 minimum staff ERO guidance.

### 3.2 Key Function: Emergency Classifications

The Emergency Classifications function includes the following NUREG-0654 R2 Table B-1 task:

Evaluate plant conditions and recommend emergency classifications.

The major task in the proposed emergency plan is aligned with the NUREG-0654 R2 guidance.

### 3.2.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	(1) Shift Classification	(1) Emergency Classification
None	Advisor(a)	Advisor**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

## 1. Emergency Plan Change Assessment

The current emergency plan does not assign an Emergency Classification Advisor on-shift ERO collateral duty for the Emergency Classifications function, although the STA is assigned the responsibility by procedure.

The proposed emergency plan assigns the Classification Advisor on-shift ERO collateral duty to the Emergency Classifications function.

All SROs are equally trained and qualified with regard to emergency classification (Guide #:0901003 LO Qualification Guide R8, Attachment C: Record of OJT/TPE Performance C3 – Direct RO/SRO Tasks, Task L52 ID 02-200-010-501 Perform Emergency Coordinator Responsibilities). In the current emergency plan, the Classification Advisor can be performed by the STA, if separate from the SM, or an available SRO (such as a Unit Supervisor), as needed. In the proposed emergency plan the Classification Advisor can be performed by any available SRO (such as a Unit Supervisor), as needed.

No functional changes have been made to the Classification Advisor on-shift ERO position for the Emergency Classifications function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns the Classification Advisor on-shift ERO position as a collateral duty to the Emergency Classifications function.

The proposed emergency plan assigns the Classification Advisor on-shift ERO position as a collateral duty to the Emergency Classifications function.

The proposed emergency plan on-shift ERO staffing level meets the NUREG-0654 R2 guidance for the Emergency Classifications function.

### 3.2.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	(1) Classification Advisor	(1) TSC Emergency
	(TSC)	Classification Advisor

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign a minimum staff ERO position for the Emergency Classifications function.

The proposed emergency plan provides one (1) TSC Classification Advisor minimum staff ERO position for the Emergency Classifications function.

The TSC Classification Advisor has been added as a minimum staff ERO position for the Emergency Classifications function.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) TSC Emergency Classification Advisor minimum staff ERO position for the Emergency Classifications function.

The proposed emergency plan provides one (1) TSC Classification Advisor minimum staff ERO position for the Emergency Classifications function.

The proposed emergency plan TSC Classification Advisor minimum staff ERO position meets the NUREG-0654 R2 guidance for the Emergency Classifications function.

### 3.3 Key Function: Communications

The Communications function includes the following NUREG-0654 R2 Table B-1 task:

Communicate ECLs and PARs to OROs, including the NRC.

The major task in the proposed emergency plan is aligned with the NUREG-0654 R2 guidance.

### 3.3.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Communicator(a)	(1) Shift Communicator(a)	(1) Communicator**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it

continues to be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns the on-shift Emergency Coordinator (Shift Manager) ERO position to the Communications function as a collateral duty.

The proposed emergency plan assigns a Shift Communicator (typically the Shift Manager position) to the Communications function as a collateral duty.

No functional changes have been made to the on-shift ERO positions for the Communications function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns an on-shift position to the Communications function as a collateral duty.

The proposed emergency plan assigns a Shift Communicator (typically the Shift Manager position) to the Communications function as a collateral duty.

The proposed emergency plan Communicator on-shift ERO collateral duty meets the NUREG-0654 R2 guidance for the Communications function.

### 3.3.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) State/County	(1) OBO Communicator (TSC)	(1) ORO Communicator (TSC
Communicator (TSC)	(1) ORO Communicator (TSC)	at Alert or higher)
(1) State/County	None	(1) ORO Communicator (EOF
Communicator (EOF)	None	at SAE or higher)
(1) ENS Communicator (TSC)	(1) ENS Communicator (TSC)	(1) NRC Communicator (TSC
(1) ENS Communicator (13C) (1) EN		at Alert or higher)

### 1. Emergency Plan Change Assessment

### A. ORO Notifications (State/County)

The current emergency plan assigns one (1) TSC State/County Communicator minimum staff ERO position at the Alert emergency classification level and one (1) EOF State/County Communicator minimum staff ERO position at the Site Area Emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator minimum staff ERO position at the Alert emergency classification level to the Communications function.

### B. NRC Notifications

The current emergency plan assigns one (1) TSC ENS Communicator minimum staff ERO position at the Alert emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ENS Communicator as a minimum staff ERO position at the Alert emergency classification level for the Communications function.

## 2. NUREG-0654 R2 Alignment Assessment

# A) ORO Notifications (State/County)

NUREG-0654 R2 assigns one (1) TSC ORO Communicator minimum staff ERO position at the Alert emergency classification level and one (1) EOF ORO Communicator minimum staff ERO position at the Site Area Emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator minimum staff ERO position at the Alert emergency classification level to the Communications function.

## B) NRC Notifications

NUREG-0654 R2 assigns one (1) TSC NRC Communicator minimum staff ERO position to the ENS aspect of the Communications function.

The proposed emergency plan assigns one (1) TSC ENS Communicator minimum staff ERO position to the ENS aspect of the Communications function.

The proposed emergency plan TSC ENS Communicator minimum staff ERO position meets the NUREG-0654 R2 guidance for the ENS aspect of the Communications function.

[Potential RIE 1-2] The proposed emergency plan does not provide an EOF ORO Communicator minimum staff ERO position at the Site Area Emergency classification level for the Communications function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the ORO aspect of the Communications function from two (2) to one (1).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

### 3.4 Key Function: Supervision of RP Staff and Site Radiation Protection

The Supervision of Radiation Protection Staff and Site Radiation Protection function includes the following NUREG-0654 R2 Table B-1 tasks:

- Evaluate and assess plant and offsite radiological data in the development of onsite protective actions and offsite PARs.
- Recommend onsite protective actions and offsite PARs to the applicable decisionmaker.
- Direct all radiation protection activities, including Field Monitoring Team (FMT) direction.
- Provide relevant information to applicable communicators who are communicating offsite PARs to OROs.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 quidance.

# 3.4.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	(1) Shift Manager(a)	(1) Operations Shift
		Manager**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign an on-shift ERO collateral duty for the Supervision of RP Staff and Site Radiation Protection function.

The proposed emergency plan assigns the Shift Manager on-shift ERO collateral duty to the Supervision of RP Staff and Site Radiation Protection function.

No functional changes have been made to the on-shift ERO position for the Supervision of Radiation Protection Staff and Site Radiation Protection function. Although not specifically stated in the current emergency plan, the Shift Manager has overall supervision/management of all on-shift positions.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns the Supervision of Radiation Protection Staff and Site Radiation Protection function to the Shift Manager as a collateral duty.

The proposed emergency plan assigns the Supervision of Radiation Protection Staff and Site Radiation Protection function to the Shift Manager as a collateral duty.

The proposed emergency plan meets the NUREG-0654 R2 guidance for assigning the Shift Manager position to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

# 3.4.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) TSC RP Supervisor (TSC)	(1) TSC RP Coordinator (TSC)	(1) TSC Site Radiation Protection Coordinator (TSC at Alert or higher)
None	(1) EOF RP Coordinator (EOF)	(1) EOF Radiation Protection  Manager (EOF at SAE or higher)

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC RP Supervisor minimum staff ERO position to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one (1) TSC RP Coordinator and one (1) EOF RP Coordinator minimum staff ERO positions to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

EOF RP Coordinator minimum staff ERO position has been added to better align with the guidance in NUREG-0654 R2 for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 guidance assigns one (1) TSC RP Coordinator minimum staff ERO position and one (1) EOF RP Manager minimum staff ERO position for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one (1) TSC RP Coordinator and one (1) EOF RP Coordinator minimum staff ERO positions to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan TSC RP Coordinator and the EOF RP Coordinator minimum staff ERO positions meet NUREG-0654 R2 guidance for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

# 3.5 Key Function: Dose Assessments / Projections

The Dose Assessments / Projections function includes the following NUREG-0654 R2 Table B-1 task:

 Perform Dose Assessments / Projections and provide input to applicable PAR decision-maker.

The major task in the proposed emergency plan is aligned with the NUREG-0654 R2 guidance.

# 3.5.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	(1) Shift Dose Assessor(a)	(1) Dose Assessment /
140110		Projections Staff**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign a Dose Assessor on-shift ERO collateral duty for the Dose Assessments / Projections function, although the on-shift Chemistry Technician is assigned the responsibility by procedure.

The proposed emergency plan assigns a Dose Assessor on-shift ERO collateral duty for the Dose Assessments / Projections function, which can be performed by any qualified on-shift individual (typically, the RPQI positions are task-qualified to perform dose assessment).

No functional changes have been made to the on-shift ERO position for the Dose Assessments / Projections function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 guidance assigns the on-shift Dose Assessor ERO position as a collateral duty for the Dose Assessments / Projections function.

The proposed emergency plan assigns the on-shift Dose Assessor ERO position as a collateral duty for the Dose Assessments / Projections function.

The proposed emergency plan assignment of the on-shift Dose Assessor ERO position as a collateral duty and meets NUREG-0654 R2 guidance for the on-shift Dose Assessments / Projections function.

# 3.5.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Dose Assessment Technician (TSC)	(1) Remote Dose Assessor (Remote)	(1) Dose Assessment/ Projection Staff (TSC at Alert or higher)
(1) Dose Assessment Coordinator (EOF)	(1) EOF Dose Assessor (EOF)	(1) Dose Assessment/ Projection Staff (EOF at SAE or higher)

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC Dose Assessment Technician and one (1) EOF Dose Assessment Coordinator minimum staff ERO positions to the Dose Assessments / Projections function.

The proposed emergency plan assigns one (1) Remote Dose Assessor and one (1) EOF Dose Assessor minimum staff ERO positions to the Dose Assessments / Projections function.

No functional change has been made to the two (2) Dose Assessment minimum staff ERO positions for the Dose Assessments / Projections function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC Dose Assessor and one (1) EOF Dose Assessor minimum staff ERO positions for the Dose Assessments / Projections function.

The proposed emergency plan assigns one (1) Remote Dose Assessor and one (1) EOF Dose Assessor minimum staff ERO positions to the Dose Assessments / Projections function.

The proposed emergency plan Dose Assessor minimum staff ERO positions meet the NUREG-0654 R2 guidance for the Dose Assessments / Projections function.

# 3.6 Key Function: Radiation Protection

The Radiation Protection function includes the following NUREG-0654 R2 Table B-1 tasks:

- Provide qualified radiation protection coverage for responders accessing potentially unknown radiological environments during emergency conditions.
- Provide in-plant surveys.
- Control dosimetry and radiologically controlled area access.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

# 3.6.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) RP Technician	(1) RP Technician	(2) Radiation Protection
(1) Rad/Chemistry Technician	(1) RP Qualified Individual	Personnel

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it continues to be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) RPT and one (1) Rad/Chemistry Technician on-shift ERO positions to the Radiation Protection function.

The proposed emergency plan assigns one (1) RPT and one (1) RP Qualified Individual on-shift ERO positions to the Radiation Protection function.

No functional changes have been made to the on-shift ERO positions for the Radiation Protection function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns two (2) on-shift Radiation Protection Personnel to the Radiological Protection function.

The proposed emergency plan assigns one (1) RPT and one (1) RP Qualified Individual on-shift ERO positions to the Radiation Protection function.

The proposed emergency plan on-shift RPT and RP Qualified Individual meet the NUREG-0654 R2 guidance for the Radiation Protection function.

[Potential RIE 1-3] The proposed emergency plan allows collateral duty assignments to be given to radiation protection personnel when performing the Radiation Protection function. Specifically, this change allows radiation protection personnel to perform the Dose Assessment /Projections function and support other on-shift actions when not assigned a response activity.

This change deviates from the NUREG-0654 R2 on-shift staff ERO position guidance.

# 3.6.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(6) RP Technician	(3) RP Technician	(6) Radiation Protection
(0) RF Technician	(2) RP Qualified Individual	Personnel

# 1. Emergency Plan Change Assessment

The current emergency plan provides six (6) RP Technicians as the minimum staff ERO to the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals as the minimum staff ERO assigned to the Radiation Protection function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides six (6) RP Technicians as the minimum staff ERO assigned to the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals as the minimum staff ERO assigned to the Radiation Protection function.

[Potential RIE 1-4] The proposed emergency plan reduces the number and qualifications of minimum staff ERO positions for the Radiation Protection function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Radiation Protection function from six (6) in the current emergency plan and in NUREG-0654, to five (5) in the proposed emergency plan, consisting of three (3) RPTs and two (2) RP Qualified individuals that are task trained but not required to be ANSI equivalent RPTs.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

# 3.7 Key Function: Field Monitoring Teams (FMTs)

The Field Monitoring Teams function includes the following task:

Provide onsite (out of plant) and offsite surveys.

The major task in the proposed emergency plan is aligned with the NUREG-0654 R2 guidance.

# 3.7.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	Not applicable

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign the Field Monitoring Teams function to an on-shift position.

The proposed emergency plan does not assign the Field Monitoring Teams function to an on-shift position.

No functional changes have been made to the on-shift ERO positions for the Field Monitoring Teams function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 does not assign the Field Monitoring Teams function to an on-shift position.

The proposed emergency plan does not assign the Field Monitoring Teams function to an on-shift position.

The proposed emergency plan is consistent with NUREG-0654 R2 guidance regarding the Field Monitoring Team function for the on-shift ERO.

# 3.7.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
		(1) Onsite FMT Qualified
(2) RP Technician	None	individual
		(1) Onsite FMT Driver
	(2) Offsite FM Technician	(2) Offsite FMT Qualified
(4) RP Technician		individual
	(2) Offsite FM Driver	(2) Offsite FMT Driver

#### 1. Emergency Plan Change Assessment

# A. Onsite Field Monitoring

The current emergency plan assigns two (2) RP Technicians minimum staff ERO positions to the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

# B. Offsite Field Monitoring

The current emergency plan assigns four (4) RP Technicians as minimum staff ERO to the offsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan assigns two (2) Field Monitoring Team Technicians and two (2) Field Monitoring Team Drivers as the minimum staff ERO to the offsite field monitoring aspect of the Field Monitoring Teams function.

No functional change has been made to the four (4) Field Monitoring Team minimum staff ERO positions for the offsite field monitoring aspect of the Field Monitoring Teams function.

# 2. NUREG-0654 R2 Alignment Assessment

#### A. Onsite Field Monitoring

NUREG-0654 R2 assigns one (1) onsite Field Monitoring Team Technician and one (1) onsite Field Monitoring Team Driver as minimum staff ERO to the onsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

# B. Offsite Field Monitoring

NUREG-0654 R2 assigns two (2) offsite Field Monitoring Team Technicians and two (2) Field Monitoring Team Drivers minimum staff ERO members for the offsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan assigns two (2) offsite Field Monitoring Team Technicians and two (2) Field Monitoring Team Drivers minimum ERO members for the offsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan minimum staff ERO offsite Field Monitoring Team position staffing level meets the NUREG-0654 R2 guidance for the Radiation Protection function.

[Potential RIE 1-5] The proposed emergency plan does not staff the onsite field monitoring minimum staff ERO position for the Field Monitoring Teams function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the onsite field monitoring aspect of the Field Monitoring Teams function from two (2) to zero (0).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

# 3.8 Key Function: Engineering

The Engineering function includes the following NUREG-0654 R2 Table B-1 tasks:

- Provide engineering coverage related to the specific discipline of the assigned engineer.
- Monitor and evaluate plant and event conditions.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

# 3.8.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Shift Technical Advisor	(1) Shift Technical Advisor(a)	(1) Core/Thermal Hydraulics Engineer**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) STA on-shift ERO position to the Engineering function.

The proposed emergency plan assigns the Engineering function to the STA as a collateral duty.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns the Engineering function to a Core/Thermal Hydraulics Engineer as a collateral responsibility.

The proposed emergency plan assigns the Engineering function to the STA as a collateral duty.

The proposed emergency plan Shift Technical Advisor ERO position meets the NUREG-0654 R2 guidance for the on-shift Engineering collateral duty function.

[Potential RIE 1-6] The proposed emergency plan does not assign a dedicated on-shift individual to the Engineering function. Specifically, this change reduces the overall number of on-shift minimum staff ERO positions used for the Engineering function from one (1) to zero (0).

This change deviates from the current emergency plan on-shift staff ERO position requirements.

# 3.8.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Reactor Engineer (EOF)	(1) Reactor Engineer	(1) Core/Thermal Hydraulics
	(Remote)	
(1) Electrical/I&C Engineer	(1) Electrical/I&C Engineer	(1) Electrical / Instrumentation
(EOF)	(Remote)	and Control (I&C)
(1) Mechanical Engineer	(1) Mechanical Engineer	(1) Mechanical
(EOF)	(Remote)	

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as minimum staff ERO positions to the Engineering function.

The proposed emergency plan assigns one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as minimum staff ERO positions to the Engineering function.

No functional change has been made to the three (3) Engineer minimum staff ERO positions for the Engineering function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Nuclear Engineer, one (1) Electrical Engineer, and one (1) Mechanical Engineer as minimum staff ERO positions to the Engineering function.

The proposed emergency plan assigns one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as minimum staff ERO positions to the Engineering function.

The proposed emergency plan minimum staff ERO positions meet the NUREG-0654 R2 guidance for the Engineering function. The major tasks are aligned with that stated in NUREG-0654 R2 guidance.

#### 3.9 Key Function: Supervision of Repair Team Activities

The Supervision of Repair Team Activities function includes the following task:

Direct in-plant event response and repair activities.

The major task in the proposed emergency plan is aligned with the NUREG-0654 R2 guidance.

# 3.9.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	Not applicable

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign an on-shift position to the Supervision of Repair Team Activities function.

The proposed emergency plan does not assign an on-shift position to the Supervision of Repair Team Activities function.

No functional changes have been made to the on-shift staff ERO positions for the Supervision of Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 does not assign an on-shift position to the Supervision of Repair Team Activities function.

The proposed emergency plan does not assign an on-shift position to the Supervision of Repair Team Activities function.

The proposed emergency plan is consistent with NUREG-0654 R2 guidance regarding the Supervision of Repair Team Activities function for the on-shift ERO.

# 3.9.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) OSC Manager	(1) Lead OSC Supervisor	(1) OSC Supervisor
(1) OSC Supervisor	(1) FIN Supervisor	<ul><li>(1) Electrical Supervisor</li><li>(1) Mechanical Supervisor</li><li>(1) I&amp;C Supervisor</li></ul>
None	None	(1) RP Supervisor

# 1. Emergency Plan Change Assessment

The current emergency plan, which is based on NUREG-0654 R1, does not contain this function. However, the current emergency plan assigns one (1) OSC Manager

and one (1) OSC Supervisor as minimum staff ERO members to the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) FIN Supervisor as minimum staff ERO members to the Supervision of Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) OSC Supervisor, one (1) Electrical Supervisor, one (1) Mechanical Supervisor, one (1) I&C Supervisor, and one (1) RP Supervisor as minimum staff ERO members to the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) FIN Supervisor as minimum staff ERO members to the Supervision of Repair Team Activities function.

**[Potential RIE 1-7]** The proposed emergency plan does not include an OSC RP Supervisor minimum staff ERO position to the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO guidance.

[Potential RIE 1-8] The proposed emergency plan does not assign OSC maintenance supervisors for each craft. Specifically, this change reduces the number of OSC craft supervisor minimum staff ERO positions used for the Supervision of Repair Team Activities function from three (3) to one (1).

This change deviates from the NUREG-0654 R2 minimum staff ERO guidance.

#### 3.10 Key Function: Repair Team Activities

The Repair Team Activities function does not specify a major task in NUREG-0654 R2 Table B-1.

# 3.10.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	Not applicable

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that no maintenance personnel were called upon to perform an activity from the emergency procedures or assigned an activity from non-emergency procedures that impacted the ability of another on-shift ERO member to perform their function.

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign on-shift positions to the Repair Team Activities function.

The proposed emergency plan does not assign on-shift positions to the Repair Team Activities function.

The NUREG-0654 R2 technical basis for the ERO guidance states that:

Revision 1 of NUREG-0654/FEMA-REP-1 did not describe why maintenance personnel were expected to be on-shift. This has led to issues related to consistency in interpretation and the expected qualification of these personnel, primarily on-shift. The NRC has determined that, from an EP perspective, the ability to get emergency core cooling system (ECCS) equipment operational was the primary basis for necessitating maintenance expertise while on-shift. Maintenance staff expertise may be advantageous for licensees to consider for other reasons, and at their discretion; however, for the purposes of NUREG-0654/FEMA-REP-1, the only area where maintenance availability should typically be necessary on-shift is for ECCS issues. However, a licensee's ECCS is designed to be redundant and diverse such that common mode failures are very unlikely. As a result, the need to accommodate maintenance functionality on-shift is unnecessary.

Maintenance personnel are not required for the operation of the ECCS or other safety related systems. Minor repairs (such as reset breakers, replace fuses, lubricate equipment, install spool piece, etc.) are performed by on-shift operations personnel qualified to perform the actions as part of normal, abnormal and emergency operating procedure activities. Major repair activities are not necessary to support the emergency operations procedures which ensure the plant can be placed in a safe shutdown condition.

Use of maintenance personnel for beyond design basis tasks, such as FLEX and/or SAMG activities, is documented and controlled outside the scope of the emergency preparedness program and are governed under other applicable regulations and guidance.

Use of maintenance personnel for fire brigade or rescue activities are outside the scope of the emergency preparedness program and are governed under other applicable requirements, such as the site fire protection plan and technical specifications for that function.

Maintenance personnel are not trained or used to performing EP functions (such as offsite communications). Emergency Plan Implementing Procedures (EPIPs) do not assign any on-shift response actions to maintenance personnel.

No functional changes have been made to the on-shift staff ERO positions for the Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 does not assign the Repair Team Activities function to an on-shift position.

The proposed emergency plan does not assign the Repair Team Activities function to an on-shift position.

The proposed emergency plan meets NUREG-0654 R2 guidance regarding the Repair Team Activities function for the on-shift ERO.

# 3.10.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(2) Electrician	(1) Electrician	(1) Electrician
(2) Mechanic	(1) Mechanic	(1) Mechanic
(1) I&C Technician	(1) I&C Technician	(1) I&C Technician
		Additional Electrician as
		needed
None	None	Additional Mechanic as
		needed
		Additional I&C staff if needed

# 1. Emergency Plan Change Assessment

The current emergency plan assigns two (2) Electricians, two (2) Mechanic, and one (1) I&C Technician minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician minimum staff ERO positions to the Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan minimum staff ERO maintenance positions meet NUREG-0654 R2 guidance for the Repair Team Activities function.

**[Potential RIE 1-9]** The proposed emergency plan reduces the number of Electricians from two (2) to (1) and the number of Mechanics from (2) to one (1) for the Repair Team Activities function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Repair Team Activities function from five (5) to three (3).

This change deviates from the current emergency plan minimum staff ERO position requirements.

# 3.11 Key Function: Security

The Security function includes the following task:

 Coordinate security related activities and information with the Emergency Coordinator.

The major task in the proposed emergency plan is aligned with the NUREG-0654 R2 quidance.

# 3.11.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Security Shift Supervisor	(1) Security Shift Supervisor	Security staffing per the site-
Security staff(b)	Security staff(b)	specific security plan.

## (b) Per the site Security Plan.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) on-shift Security Shift Supervisor ERO position to the Security function.

The proposed emergency plan assigns one (1) on-shift Security Shift Supervisor ERO position to the Security function.

No functional changes have been made to the on-shift staff ERO positions for the Security function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 specifies on-shift security staffing is per the site-specific security plan for the Security function.

The proposed emergency plan assigns one (1) on-shift Security Shift Supervisor ERO position to the Security function.

The NUREG-0654 R2 technical basis for the ERO guidance states that:

viii This note emphasizes that on-shift operations staff, security staff, and fire brigade staff (as applicable) are controlled by other non-EP processes. It is only when EP functions are assigned to on-shift staff that the requirements of 10 CFR Part 50, Appendix E, Section IV.A.9 apply, thus requiring an on-shift staffing analysis be performed.

The proposed emergency plan assigns the on-shift Security Shift Supervisor to the Security function, which meets the NUREG-0654 R2 guidance for on-shift operations staff, security staff, and fire brigade staff who are assigned ERO tasks.

# 3.11.2 Minimum staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2				
(1) Security Supervisor (TSC)	(1) Security Liaison (TSC)	(1) Security Liaison (TSC)				

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Security Supervisor minimum staff ERO position to the Security function.

The proposed emergency plan assigns one (1) Security Liaison minimum staff ERO position to the Security function.

No functional changes have been made to the minimum staff ERO positions for the Security function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Security Liaison minimum staff ERO position for the Security function.

The proposed emergency plan assigns one (1) Security Liaison minimum staff ERO position to the Security function.

The proposed emergency plan Security Liaison minimum staff ERO position meets the NUREG-0654 R2 guidance for the Security function.

# 3.12 Key Function: Media Information

The Media Information function includes the following NUREG-0654 R2 Table B-1 task:

Manage and coordinate media information related to the event

The major task in the proposed emergency plan is aligned with the NUREG-0654 R2 guidance.

# 3.12.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	Not applicable

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign an on-shift position to the Media Information function.

The proposed emergency plan does not assign an on-shift position to the Media Information function.

No functional changes have been made to the on-shift staff ERO positions for the Media Information function.

# 2. NUREG-0654 R2 Alignment Assessment

The current emergency plan does not assign an on-shift position to the Media Information function.

The proposed emergency plan does not assign an on-shift position to the Media Information function.

The proposed emergency plan meets NUREG-0654 R2 guidance regarding the Media Information function for the on-shift ERO.

# 3.12.2 Minimum staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

	Current E-Plan	Proposed E-Plan	NUREG-0654 R2			
	(1) Emergency Information	(1) Site JIS Manager	JIC/JIS staff to address media			
	Manager	(1) Site JIS Coordinator	inquiries at the Alert ECL**			
Nuclear Information Staff*		(1) Remote JIS Manager	Staff to perform JIC/JIS related			
		JIS staff (d)	tasks at SAE ECL or greater			

- \* The staff of the FP&L Company Communications Department will be assigned as needed to the corporate Joint Information Center.
- (d) JIS per NextEra Communications Emergency Response Plan. Does not need to be performed in the JIC, but the JIS function needs to be established at this point.
- \*\* Does not need to be performed in the TSC/OSC, but needs to be established at this point.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Emergency Information Manager minimum staff ERO positions to the Media Information function. Non-ERO JIS personnel are staffed from FP&L Company Communications Department.

The proposed emergency plan assigns one (1) Site JIS Manager, one (1) Site JIS Coordinator, and one (1) Remote JIS Manager as minimum staff ERO positions to the Media Information function. Non-ERO JIS personnel staffed from Nuclear Marketing/ Communications group with support from corporate group.

The current emergency plan assigns staffing of the near-site JIC as needed. The proposed emergency plan adds two (2) dedicated minimum staff ERO position for the near-site JIC in support of the JIS process. Non-ERO corporate JIS personnel support is not changed.

No functional changes have been made to the minimum staff ERO positions for the Media Information function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 calls for the minimum staff ERO JIC/JIS staff positions needed to address media inquiries at the Alert emergency classification level and to perform JIC/JIS related tasks at Site Area Emergency classification level.

The proposed emergency plan assigns one (1) Site JIS Manager, one (1) Site JIS Coordinator, and one (1) Remote JIS Manager as minimum staff ERO positions to the Media Information function. Non-ERO JIS personnel staffed from Nuclear Marketing/ Communications group with support from corporate group.

The NUREG-0654 R2 technical basis for the ERO guidance states that:

While the exact staffing composition is left to the licensee to determine, with input from applicable OROs, and from the Federal Emergency Management Agency, media relations is an important part of effective emergency response and is consistent with the Joint Information System and Joint Information Center portion of NIMS. As such, the need for media support should be part of the licensee's ERO. The augmentation (support) of this function should, at a minimum, be whatever is absolutely needed to support this function, i.e., without those positions this function could not occur. This should be staffed within 60-min of an Alert ECL, or greater, to address media inquiries; and within 60-minutes of an SAE ECL, or greater, to support media related tasks.

The proposed emergency plan provides a minimum staff complement of three (3) dedicated ERO positions to coordinate with non-ERO corporate communications personnel and perform activities related to the Media Information function.

The NextEra Communications Department operates a Joint Information System (JIS) for day-to-day operations and at all emergency classification levels. The Communications Department responds to media and public inquiries for abnormal conditions and events at any declared emergency classification level. The Communications Department coordinates with site management and ERO personnel, when staffed, to respond to media inquiries. Press releases are issued as appropriate from the Communications Department.

The proposed emergency plan minimum staff ERO positions meet the NUREG-0654 R2 guidance for the Media Information function. The major task is aligned with that stated in NUREG-0654 R2 guidance.

# 3.13 Key Function: Information Technology

The Information Technology function includes the following NUREG-0654 R2 Table B-1 task:

Ensure IT equipment is operable.

The major task in the proposed emergency plan is aligned with the NUREG-0654 R2 guidance.

# 3.13.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	Not Applicable

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign an on-shift position to the Information Technology function.

The proposed emergency plan does not assign an on-shift position to the Information Technology function.

No functional changes have been made to the on-shift staff ERO positions for the Media Information function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 guidance does not assign an on-shift position to the Information Technology function.

The proposed emergency plan does not assign an on-shift position to the Information Technology function.

The proposed emergency plan meets NUREG-0654 R2 guidance regarding the Information Technology function for the on-shift ERO.

# 3.13.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	(1) TSC IT Lead* (at Alert or higher)
None	None	(1) EOF/JIC/JIS IT Lead* (at SAE or higher)

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign TSC or EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

The proposed emergency plan does not assign TSC or EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

No functional changes have been made to the minimum staff ERO positions for the Information Technology function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) TSC IT Technician and one (1) EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

The proposed emergency plan does not assign TSC or EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

[Potential RIE 1-10] The proposed emergency plan does not assign IT Technicians in the TSC and EOF/JIC. Specifically, this change reduces the number of IT Technicians minimum staff ERO positions used for the Information Technology function from two (2) to zero (0).

This change deviates from the NUREG-0654 R2 minimum staff ERO guidance.

#### 4.0 ERO AUGMENTATION ANALYSIS

Each sub-section below provides an augmentation analysis of the impact to the on-shift ERO, regarding relief of key functions, by providing an Emergency Plan Change Assessment section and NUREG-0654 R2 Alignment Assessment section for the minimum staff ERO positions.

- The Emergency Plan Change Assessment section evaluates any difference in ERO augmentation times between the current emergency plan and the proposed emergency plan for the key function. It includes the basis for the original and proposed augmentation and justification for the change as applicable.
- The NUREG-0654 R2 Alignment Assessment section evaluates any difference in ERO augmentation times between NUREG-0654 R2 and the proposed emergency plan for the particular key function to determine conformance.

# 4.1 Key Function: Command and Control

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC Emergency Coordinator 60-minute minimum staff ERO position at the Alert emergency classification level and one (1) EOF Recovery Manager 60-minute minimum staff ERO position at the Site Area Emergency classification level to the Command and Control function.

The proposed emergency plan assigns one (1) Site Emergency Director 90-minute minimum staff ERO position at the Alert emergency classification level to the Command and Control function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC Emergency Coordinator 90-minute minimum staff ERO position at the Alert emergency classification level and one (1) EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level to the Command and Control function.

The proposed emergency plan assigns one (1) Site Emergency Director 90-minute minimum staff ERO position at the Alert emergency classification level to the Command and Control function.

Removal of the EOF Emergency Director minimum staff ERO position is a deviation documented in Section 3.1 as [Potential RIE 1-1].

[Potential RIE 2-1] The proposed emergency plan adds 30 minutes to the augmentation response time for the Site Emergency Director minimum staff ERO position that performs the Command and Control function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.2 Key Function: Emergency Classifications

# 1. Emergency Plan Change Assessment

The current emergency plan does not assign a minimum staff ERO position to the Emergency Classifications function.

The proposed emergency plan assigns one (1) TSC Classification Advisor 90-minute minimum staff ERO position to the Emergency Classifications function.

Adding the TSC Classification Advisor 90-minute ERO position enhances the capability and timeliness to perform the Emergency Classifications function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC Emergency Classification Advisor 60-minute ERO position at the Alert emergency classification level for the Emergency Classifications function.

The proposed emergency plan assigns one (1) TSC Classification Advisor 90-minute minimum staff ERO position at the Alert emergency classification to the Emergency Classifications function.

[Potential RIE 2-2] The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC Classification Advisor minimum staff ERO position that performs the Emergency Classifications function.

This change deviates from the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.3 Key Function: Communications

# 1. Emergency Plan Change Assessment

# A. ORO Notifications (State/County)

The current emergency plan assigns one (1) TSC State/County Communicator 30-minute minimum staff ERO position at the Alert emergency classification level and one (1) EOF State/County Communicator 60-minute minimum staff ERO position at the Site Area Emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator 90-minute minimum staff ERO position to the Communications function.

#### B. NRC Notifications

The current emergency plan assigns one (1) TSC ENS Communicator 60-minute minimum staff ERO position to the Communications function.

The proposed emergency plan assigns one (1) TSC ENS Communicator 90-minute minimum staff ERO position to the Communications function.

#### 2. NUREG-0654 R2 Alignment Assessment

# A. ORO Notifications (State/County)

NUREG-0654 R2 assigns one (1) TSC Offsite Communicator 60-minute ERO position at the Alert emergency classification level and one (1) EOF Offsite Communicator 60-minute ERO position at the Site Area Emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator 90-minute minimum staff ERO position to the Communications function.

# B. NRC Notifications

NUREG-0654 R2 assigns one (1) TSC NRC Communicator 60-minute ERO position at the Alert emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ENS Communicator 90-minute minimum staff ERO position at the Alert emergency classification level to the Communications function.

Removal of the EOF Offsite Communicator minimum staff ERO position is a deviation documented in Section 3.3 as [Potential RIE 1-2].

**[Potential RIE 2-3]** The proposed emergency plan adds 60 minutes (30 for NUREG-0654 guidance) to the augmentation response time to the TSC ORO Communicator minimum staff ERO position that performs the State/County notifications aspect of the Communications function.

This change deviates from the current emergency plan 30-minute ERO response time requirements and NUREG-0654 R2 60-minute ERO response time guidance.

[Potential RIE 2-4] The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC ENS Communicator minimum staff ERO position that performs the NRC notifications aspect of the Communications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.4 Key Function: Supervision of RP Staff and Site Radiation Protection

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC Radiological Supervisor 60-minute minimum staff ERO position to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one (1) TSC RP Coordinator and one (1) EOF RP Coordinator 90-minute minimum staff ERO positions to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC RP Coordinator 60-minute ERO position at the Alert emergency classification level and one (1) EOF RP Coordinator 60-minute ERO position at the Site Area Emergency classification level to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one (1) TSC RP Coordinator and one (1) EOF RP Coordinator 90-minute minimum staff ERO positions at the Alert emergency classification level to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

Response for the EOF RP Coordinator at 90 minutes from the Alert emergency classification level is comparable to a 60 minute response from a Site Area Emergency classification level, if not sooner for all realistic events.

[Potential RIE 2-5] The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC RP Coordinator minimum staff ERO position that performs the Supervision of Radiation Protection Staff and Site Radiation Protection function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.5 Key Function: Dose Assessments / Projections

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC Dose Assessment Technician 30-minute minimum staff ERO position and one (1) EOF Dose Assessment Coordinator 60-minute minimum staff ERO position to the Dose Assessments / Projections function.

The proposed emergency plan assigns one (1) Remote Dose Assessor 60-minute minimum staff ERO position and one (1) EOF Dose Assessor 90-minute minimum staff ERO positions to the Dose Assessments / Projections function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC Dose Assessor 60-minute ERO position at the Alert emergency classification level and one (1) EOF Dose Assessor 60-minute ERO position at the Site Area Emergency classification level to the Dose Assessments / Projections function.

The proposed emergency plan assigns one (1) Remote Dose Assessor 60-minute minimum staff ERO position and one (1) EOF Dose Assessor 90-minute minimum staff ERO positions to the Dose Assessments / Projections function.

Response for the EOF Dose Assessor at 90 minutes from the Alert emergency classification level is comparable to a 60 minute response from a Site Area Emergency classification level, if not sooner for all realistic events.

The proposed emergency plan meets the NUREG-0654 R2 60 and 90-minute augmentation guidance for the Dose Assessments / Projections function.

[Potential RIE 2-6] The proposed emergency plan adds 30 minutes to the augmentation response time to the Dose Assessor minimum staff ERO positions that perform the Dose Assessments / Projections function.

This change deviates from the current emergency plan 30-minute ERO response time requirements.

# 4.6 Key Function: Radiation Protection

# 1. Emergency Plan Change Assessment

The current emergency plan provides three (3) RP Technicians to a 30-minute minimum staff ERO position and three (3) RP Technicians to a 60-minute minimum staff ERO position for the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals to a 90 minute minimum staff ERO position for the Radiation Protection function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides three (3) RP Technicians to a 60-minute ERO position and three (3) RP Technicians to a 90-minute ERO position for the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals to a 90 minute minimum staff ERO position for the Radiation Protection function.

Removal of one (1) minimum staff radiation protection personnel is a deviation documented in Section 3.6 as [Potential RIE 1-4].

**[Potential RIE 2-7]** The proposed emergency plan adds 60 minutes (30 for NUREG-0654 guidance) to the augmentation response time to the radiation protection personnel minimum staff ERO positions that perform the Radiation Protection function.

This change deviates from the current emergency plan 30-minute ERO response time requirement and NUREG-0654 R2 60-minute ERO response time guidance.

# 4.7 Key Function: Field Monitoring Teams (FMTs)

# 1. Emergency Plan Change Assessment

# A. Onsite Field Monitoring

The current emergency plan assigns one (1) RP Technician to a 30-minute minimum staff ERO position and one (1) RP Technician to a 60-minute minimum staff ERO position to the onsite Field Monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

# B. Offsite Field Monitoring

The current emergency plan assigns two (2) RP Technicians as 30-minute minimum staff ERO and two (2) RP Technicians as 60-minute minimum staff ERO to the offsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan assigns two (2) Field Monitoring Team Technicians and two (2) Field Monitoring Team Drivers as 90-minute minimum staff ERO to the offsite field monitoring aspect of the Field Monitoring Teams function.

# 2. NUREG-0654 R2 Alignment Assessment

# A. Onsite Field Monitoring

NUREG-0654 R2 assigns one (1) onsite Field Monitoring Technician and one (1) onsite Field Monitoring Driver to a 60-minute minimum staff ERO position the onsite Field Monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

# B. Offsite Field Monitoring

NUREG-0654 R2 assigns one (1) offsite Field Monitoring Technician 60-minute ERO position and one (1) Field Monitoring Driver 60-minute ERO position for the Field Monitoring Teams function.

NUREG-0654 R2 assigns one (1) offsite Field Monitoring Technician 90-minute ERO position and one (1) Field Monitoring Driver 90-minute ERO position for the Field Monitoring Teams function.

The proposed emergency plan assigns two (2) Field Monitoring Team Technicians and two (2) Field Monitoring Team Drivers as 90-minute minimum staff ERO to the offsite field monitoring aspect of the Field Monitoring Teams function.

Removal of two (2) minimum staff RP Technicians from the onsite field monitoring aspect of the Field Monitoring Teams function is a deviation documented in Section 3.7 as [Potential RIE 1-5].

**[Potential RIE 2-8]** The proposed emergency plan adds 60 minutes (30 for NUREG-0654 guidance) to the Field Monitoring Team minimum staff ERO positions that performs the offsite field monitoring aspect of the Field Monitoring Teams function.

This change deviates from the current emergency plan 30-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.8 Key Function: Engineering

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Reactor Engineer to a 30-minute minimum staff ERO position, one (1) Electrical/I&C Engineer to a 60-minute minimum staff ERO position, and one (1) Mechanical Engineer to a 60-minute minimum staff ERO position for the Engineering function.

The proposed emergency plan assigns one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as 60-minute minimum staff ERO positions to the Engineering function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Nuclear Engineer, one (1) Electrical Engineer, and one (1) Mechanical Engineer 60-minute ERO positions to the Engineering function.

The current emergency plan assigns one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as 60-minute minimum staff ERO positions to the Engineering function.

The proposed emergency plan meets the NUREG-0654 R2 60-minute augmentation guidance for Engineering function.

**[Potential RIE 2-9]** The proposed emergency plan adds 30 minutes to the augmentation response time to the Reactor Engineer minimum staff ERO position that performs the Engineering function.

This change deviates from the current emergency plan 30-minute ERO response time requirement.

# 4.9 Key Function: Supervision of Repair Team Activities

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) 60-minute OSC Manager and one (1) 60-minute OSC Supervisor as minimum staff ERO positions to the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) FIN Supervisor as 90-minute minimum staff ERO positions to the Supervision of Repair Team Activities function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) 60-minute OSC Supervisor, one (1) 90-minute Electrical Supervisor, one (1) 90-minute Mechanical Supervisor, one (1) 90-minute I&C Supervisor, and one (1) 90-minute RP Supervisor ERO positions for the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) FIN Supervisor as 90-minute minimum staff ERO positions to the Supervision of Repair Team Activities function.

Removal of OSC RP Supervisor from the Supervision of Repair Team Activities function is a deviation documented in Section 3.9 as [Potential RIE 1-7].

Use of the FIN Supervisor for supervision of all craft is a deviation documented in Section 3.9 as [Potential RIE 1-8].

[Potential RIE 2-10] The proposed emergency plan adds 30 minutes to the augmentation response time for the Lead OSC Supervisor and FIN Supervisor minimum staff ERO position that performs the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan 60-minute ERO response time requirement for the OSC Manager and OSC Supervisor, and the NUREG-0654 R2 60-minute ERO response time guidance for the Lead OSC Supervisor.

# 4.10 Key Function: Repair Team Activities

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Electrician and one (1) I&C Technician as 30-minute minimum staff ERO positions, and one (1) Electrician and two (2) Mechanics as 60-minute minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician as 90-minute minimum staff ERO positions to the Repair Team Activities function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) 60-minute Electrician, one (1) 60-minute Mechanic, and one (1) 90-minute I&C Technician minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician as 90-minute minimum staff ERO positions to the Repair Team Activities function.

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Removal of one (1) Electrician and one (1) Mechanic from Repair Team Activities function is a deviation documented in Section 3.10 as [Potential RIE 1-9].

[Potential RIE 2-11] The proposed emergency plan adds 30/60 minutes to the augmentation response time of OSC craft minimum staff ERO positions that perform the Repair Team Activities function.

This change deviates from the current emergency plan 30 and 60-minute ERO response time requirements and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.11 Key Function: Security

# 1. Emergency Plan Change Assessment

The current emergency plan provides one (1) Security Supervisor 60-minute minimum staff ERO position for the Security function.

The proposed emergency plan provides one (1) Security Liaison 90-minute minimum staff ERO position for the Security function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) Security Liaison 60-minute ERO position for the Security function.

The proposed emergency plan provides one (1) Security Liaison 90-minute minimum staff ERO position for the Security function.

**[Potential RIE 2-12]** The proposed emergency plan adds 30 minutes to the augmentation response time to the Security Liaison minimum staff ERO position that performs the Security function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.12 Key Function: Media Information

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Emergency Information Manager 60-minute minimum staff ERO positions to the Media Information function. Non-ERO JIS personnel are staffed from FP&L Company Communications Department.

The proposed emergency plan assigns one (1) Site JIS Manager, one (1) Site JIS Coordinator, and one (1) Remote JIS Manager as 90-minute minimum staff ERO positions to the Media Information function. Non-ERO JIS personnel from Nuclear Marketing/Communications group with support from corporate group are capable of performing the function at 60 minutes.

The proposed emergency plan meets the current emergency plan JIS capability augmentation guidance for the Media Information function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns 60 and 90-minute JIC/JIS staff ERO positions capable of performing the Media Information function.

The proposed emergency plan assigns 60 and 90-minute JIC/JIS staff ERO positions capable of performing the Media Information function.

The proposed emergency plan meets the NUREG-0654 R2 60 and 90-minute augmentation guidance for the Media Information function.

# 4.13 Key Function: Information Technology

# 1. Emergency Plan Change Assessment

The current emergency plan does not provide a TSC IT Technician or EOF IT Technician minimum staff ERO position for the Information Technology function.

The proposed emergency plan does not provide a TSC IT Technician or EOF IT Technician minimum staff ERO position for the Information Technology function.

No functional changes have been made to the minimum staff ERO positions for the Information Technology function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) 90-minute TSC IT Technician and one (1) 90-minute EOF/JIC IT Technician minimum staff ERO position for the Information Technology function.

The proposed emergency plan does not provide a TSC IT Technician or EOF IT Technician minimum staff ERO position for the Information Technology function.

The lack of the 90-minute TSC and EOF IT Technician ERO positions is a deviation documented in the ERO Functional Analysis Section 3.13 as [Potential RIE 1-10].

#### 5.0 NON-MINIMUM STAFF ERO ANALYSIS

The current emergency plan and implementing procedures describe the required minimum staff ERO (i.e., if any position is not staffed, then the emergency plan cannot be effectively implemented). The current implementing procedures also contains trained and qualified non-minimum staff ERO positions that are available to assist the minimum staff ERO (for tasks such as administration, communications, coordination, and logistics).

By procedure, the non-minimum staff ERO positions are called out at the same time as minimum staff ERO positions. NextEra uses an all-call notification method, where all individuals qualified to fill an ERO position are notified and expected to respond to their assigned facilities. The presence of the non-minimum staff ERO positions is not required to activate the respective ERFs.

NUREG-0654 R2 guidance does not discuss non-minimum staff ERO positions. In NUREG-0654 R2 guidance, Table B-1, Note iii addresses the required minimum staffing as compared to other staff not critical to effective emergency plan implementation. Note iii states:

The minimum ERO staffing plan is that which is required to effectively implement the site-specific emergency plan (i.e., the emergency plan cannot be effectively implemented without this staff). The emergency plan should describe the minimum ERO staffing plan, while supporting implementing procedures can describe any other staff response desired by the licensee as long as this staff is not critical to effective emergency plan implementation. The augmentation times listed are intended to provide a model for applicants and licensees to consider in the development of their site-specific emergency plan.

The intent of this note is to emphasize the distinction between minimum staff ERO positions required to implement the emergency plan and non-minimum staff ERO positions that provide assistant but are not essential to the response activities.

Several non-minimum staff ERO positions remain in the implementing procedures and will continue to be notified and respond at an Alert or higher emergency classification level, at the same time as the minimum staff ERO; however, the non-minimum staff ERO positions are not required to be present to activate the Emergency Response Facilities (ERFs) or relieve the on-shift ERO of any emergency plan responsibilities.

The table below identifies the current minimum and non-minimum staff ERO positions, by facility, in comparison to the proposed minimum and non-minimum staff ERO positions. The positions have been dispositioned as follows:

Current E-Plan / Procedures	Proposed E-Plan	Disposition
TSC		
Emergency Coordinator	Site Emergency Director	Title Change
Technical Assistant to the EC	Classification Advisor	Title Change
TSC Supervisor	TSC Coordinator	Changed from Minimum to Non-
		Minimum Position/Title Change
Emergency Technical Manager		Minimum Staff Position Eliminated
TSC RP Supervisor	TSC RP Coordinator	Title Change
Dose Assessment Technician	Remote Dose Assessor	Remote (EOF supervised)
State/County Communicator	ORO Communicator	Title Change
ENS Communicator	ENS Communicator	No Change
Maintenance Manager		Minimum Staff Position Eliminated
Reactor Engineer	Reactor Engineer	Remote (TSC supervised)
Electrical / I&C Engineer	Electrical / I&C Engineer	Remote (TSC supervised)
Mechanical Engineer	Mechanical Engineer	Remote (TSC supervised)

Current E-Plan / Procedures Chemistry Supervisor TSC Security Supervisor TSC Supervisor TSC Security Supervisor TSC Supervisor Non-Minimum Position Eliminated No Supervisor Non-Minimum Position Eliminated TSC Supervisor Non-Minimum Position	, s	,	
TSC Speartiny Supervisor TSC Operators Manager Licensed Operator Support Plant Data Communicator HPN Communicator HPN Communicator Site Corporate Communicator Site Corporate Communicator TSC ERF Communicator Non-Minimum Position Eliminated Non-Minimum Position Eliminated Title Change T	Current E-Plan / Procedures	Proposed E-Plan	Disposition
TSC Operations Manager Licensed Operator Support Plant Data Communicator Plant Data Communicator HPN Communicator HPN Communicator Site Corporate Communicator TSC ERF Communicator TSC ERF Communicator Title Change COS/ERDADS Operator Engineering/Maintenance Liaison Document Control Personnel OSC Manager COSC Manager COSC Washing Title Change RP Technician RP Technician RP Technician RP Personnel RP Technician RP Condition RP Personnel RP Condition Rechanic Recovery Technician Soc Re-Cordinator ROS-Minimum Position Eliminated Non-Minimum	Chemistry Supervisor		Minimum Staff Position Eliminated
Licensed Operator Support	TSC Security Supervisor	Security Liaison	
Plant Data Communicator HPN Communicator Site Corporate Communicator FOF C	TSC Operations Manager		Non-Minimum Position Eliminated
IPPN Communicator   Non-Minimum Position Eliminated Site Corporate Communicator   TSC ERF Communicator   Title Change   Non-Minimum Position Eliminated   Non-Minimum Position	Licensed Operator Support		Non-Minimum Position Eliminated
Site Corporate Communicator   TSC ERF Communicator   Title Change   Title Change   Non-Minimum Position Eliminated   Sc			Non-Minimum Position Eliminated
EOF Communicator  ITIE Change  Non-Minimum Position Eliminated Engineering/Maintenance Lialson  Document Control Personnel  OSC  OSC Manager  Lead OSC Supervisor  FIN Supervisor  RP Technician  Mechanic  Lectrical Maintenance  Electrical Maintenance  Electrical Maintenance  Electrician  Non-Minimum Staff Position Eliminated  Non-Minimum Staff Position Eliminated  Non-Minimum Position Eliminate	HPN Communicator		Non-Minimum Position Eliminated
EOF Communicator  ITIE Change  Non-Minimum Position Eliminated Engineering/Maintenance Lialson  Document Control Personnel  OSC  OSC Manager  Lead OSC Supervisor  FIN Supervisor  RP Technician  Mechanic  Lectrical Maintenance  Electrical Maintenance  Electrical Maintenance  Electrician  Non-Minimum Staff Position Eliminated  Non-Minimum Staff Position Eliminated  Non-Minimum Position Eliminate	Site Corporate Communicator		Non-Minimum Position Eliminated
DCS/ERDADS Operator   Non-Minimum Position Eliminated Document Control Personnel Osc   Non-Minimum Position Eliminated Non-Minimum Position Eliminated Osc   Supervisor   Title Change   OSC Supervisor   FiN Supervisor   Title Change   OSC Supervisor   RP Technician   RP Qualified Individual   No Change   Electrical Maintenance   Electrician   No Change   RP Capervisor   Non-Minimum Position Eliminated   Non-Minimum Position El		TSC ERF Communicator	
Engineering/Maintenance Liaison   Non-Minimum Position Eliminated Document Control Personnel   Non-Minimum Position Eliminated   Non-Minimum	DCS/ERDADS Operator		
Document Control Personnel			
OSC Supervisor FIN Supervisor Title Change OSC Supervisor FIN Supervisor Title Change RP Personnel RP Technician RP Qualified Individual Title Change (training changed) Mechanic Mechanic No Change RP Qualified Individual Title Change (training changed) Mechanic No Change Electrician No Change Electricial Maintenance Electrician No Change I&C Technician No Change Chemistry Technician No Change Chemistry Technician No Change Chemistry Technician No Change Chemistry Technician No-Minimum Position Eliminated Nor-Minimum Position Eliminated Nor-Minimum Position Eliminated Nor-Minimum Position Eliminated Chemistry Supervisor Nor-Minimum Position Eliminated Nor-Minimum Position Eliminated Nor-Minimum Position Eliminated Contract Medical Personnel Nor-Minimum Position Eliminated Nor-Minimum Staff Position Eliminated Nor-Minimum Position Eliminated N			
SSC Manager			
GSC Supervisor		Lead OSC Supervisor	Title Change
RP Technician RP Qualified Individual Title Change (training changed) Mechanic Mechanic Mechanic No Change Electrical Maintenance Electrician I&C Technician Chemistry Technician No Change RP Electrician No Change RP Technician No Change No Change RP Technician No Change RP Technician No Change RP Technician No Change RP Technician No Change No Change RP Technician No Change RP Technician No Change No Change No Change RP Technician No Change No Change RP Technician No Change No Change Ro Change No Change No Change Ro Change No Change No Change No Change Ro Change Ro Change No Change Non-Minimum Position Eliminated Recovery Manager R			
RP Qualified Individual   Title Change (training changed)			
Mechanic   Electrician   No Change   Electrician   No Change   Electrician   I&C Technician   I&C Technician   I&C Technician   I&C Technician   No Change   Chemistry Technician   Minimum Staff Position Eliminated   OSC RP Supervisor   Non-Minimum Position Eliminated   Non-Minimum Position Eliminated   Operations Supervisor   Non-Minimum Position Eliminated   Operations Supervisor   Non-Minimum Position Eliminated   Non-Minimum Position Eliminated   Chemistry Supervisor   Non-Minimum Position Eliminated   Non-Minimum Position Eliminated   Chemistry Supervisor   Non-Minimum Position Eliminated   Non-Minimum Position Eliminated   Electrical/I&C Coordinator   Non-Minimum Position Eliminated   Electrical/I&C Coordinator   Non-Minimum Position Eliminated   OSC Recorder   OSC ERF Communicator   Non-Minimum Position Eliminated   OSC Status Board Keeper   OSC ERF Communicator   Non-Minimum Position Eliminated   OSC Status Board Keeper   Non-Minimum Position Eliminated   Non-Minimum Staff Position Eliminated   Non-Minimum Staff Position Eliminated   Non-Minimum Staff Position Eliminated   Non-Minimum Staff Position Eliminated   Non-Minimum Position El	THE FORESTITION		
Electrical Maintenance Electrician I&C Technician I&C Technician I&C Technician I&C Technician I&C Technician No Change I&C Technician I&C Technician No Change Minimum Staff Position Eliminated OSC RP Supervisor Non-Minimum Position Eliminated Non-Minimum Position Eliminated Non-Minimum Position Eliminated Chemistry Supervisor Non-Minimum Position Eliminated Chemistry Supervisor Non-Minimum Position Eliminated Mechanical Coordinator Immediate Contract Medical Personnel Non-Minimum Position Eliminated Nor-Minimum Position Eliminated Personnel Nor-Minimum Position Eliminated Nor-Minimum Position Eliminated Nor-Minimum Position Eliminated EOF Personnel FMT Technician Moved to EOF From OSC RP Personnel FMT Technician Moved to EOF From OSC RP Personnel Pocs/ERDADS Operator Minimum Staff Position Eliminated Minimum Position Eliminated Non-Minimum Position Eliminated	Mechanic		
I&C Technician   I&C Technician   Minimum Staff Position Eliminated Chemistry Technician   Mon-Minimum Position Eliminated Re-Entry Coordinator   Non-Minimum Position Eliminated Non-Minimum Position Eliminated Non-Minimum Position Eliminated Non-Minimum Position Eliminated Chemistry Supervisor   Non-Minimum Position Eliminated Non-Minimum Position Eliminated Chemistry Supervisor   Non-Minimum Position Eliminated Non-Minimum Position Eliminated Electrical/I&C Coordinator   Non-Minimum Position Eliminated Electrical/I&C Coordinator   Non-Minimum Position Eliminated Contract Medical Personnel   Non-Minimum Position Eliminated Nose Recorders   Non-Minimum Position Eliminated Materials Management Personnel   Non-Minimum Position Eliminated Materials Management Personnel   Non-Minimum Position Eliminated Nose Recorder   OSC Recorder   OSC ERF Communicator   Non-Minimum Position Eliminated Nose Status Board Keeper   Non-Minimum Position Eliminated OSC Status Board Keeper   Non-Minimum Position Eliminated OSC Status Board Keeper   Non-Minimum Position Eliminated Personnel   Non-Minimum Position Eliminated S/C (Hot Ring Down)   Non-Minimum Position Eliminated Eliminated S/C (Hot Ring Down)   Minimum Staff Position Eliminated S/C (Hot Ring Down)   Minimum Staff Position Eliminated S/C (Hot Ring Down)   Mon-Minimum Staff Position Eliminated S/C (Hot Ring Down)   Mon-Minimum Staff Position Eliminated Eliminated S/C (Hot Ring Down)   Mon-Minimum Staff Position Eliminated S/C (Hot Ring Down)   Mon-Minimum Staff Position Eliminated Elimin			
Chemistry Technician			
OSC RP Supervisor   Non-Minimum Position Eliminated Re-Entry Coordinator   Non-Minimum Position Eliminated Operations Supervisor   Non-Minimum Position Eliminated Chemistry Supervisor   Non-Minimum Position Eliminated Mechanical Coordinator   Non-Minimum Position Eliminated Electrical/I&C Coordinator   Non-Minimum Position Eliminated Electrical/I&C Coordinator   Non-Minimum Position Eliminated Contract Medical Personnel   Non-Minimum Position Eliminated Dose Recorders   Non-Minimum Position Eliminated Dose Recorders   Non-Minimum Position Eliminated Materials Management Personnel   Non-Minimum Position Eliminated OSC Recorder   OSC ERF Communicator   Non-Minimum Position Eliminated OSC Recorder   OSC ERF Communicator   Non-Minimum Position Eliminated OSC Status Board Keeper   Non-Minimum Position Eliminated OSC Status Board Keeper   Non-Minimum Position Eliminated OSC Security Officer   Non-Minimum Position Eliminated Personnel   OSC Security Officer   Non-Minimum Position Eliminated Personnel   OSC Security Officer   Non-Minimum Position Eliminated Descoration Security Officer   Non-Minimum Position Eliminated Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT Driver   Moved to EOF From OSC RP Personnel   FMT		lao recimician	
Re-Entry Coordinator Operations Supervisor Operations Supervisor Non-Minimum Position Eliminated Mechanical Coordinator Electrical/I&C Coordinator Contract Medical Personnel Dose Recorders Materials Management Personnel OSC Recorder OSC RP Communicator OSC Status Board Keeper OSC Security Officer EOF Recovery Manager EOF Manager RM Operations Advisor S/C (Hot Ring Down) Communicator Dose Assessment Coordinator EOF RP Dose Assessor FMT Technician DCS/ERDADS Operator EMT Driver DCS/ERDADS Operator EOF RP Coordinator DCS RP Coordinator EOF RP Manager DCS/RP Coordinator EOF RP Coordinator DCS/RP Data Status to the RM ENS Communicator DCS/RP Data Status to the RM ENS Coordinator DCS/RP Data Status to the RM ENS Coordinator EOF RP Coordinator DCS/RP Manager EOF RP Coordinator DCS/PP Manager EOF Mon-Minimum Position Eliminated DCS/ERDADS Operator Minimum Staff Position Eliminated DCS/ERDADS Operator EOF RP Manager EOF RP Mon-Minimum Staff Position Eliminated DCS/ERDADS Operator EOF RP Mon-Minimum Staff Position Eliminated DCS/ERDADS Operator EOF Supervisor Admin Coordinator Title Change Title Change Title Change Minimum Staff Position Eliminated DCS/ERDADS Operator Eor Supervisor Admin Coordinator Title Change Title Change Title Change Minimum Staff Position Eliminated DCS/ERDADS Operator Eor Supervisor Admin Coordinator Title Change Tochnical Assistant to the RM ENS Communicator Changed from non-minimum to minimum staff ERO position/ Title Change Title Cha			
Departions Supervisor			
Chemistry Supervisor   Non-Minimum Position Eliminated   Mechanical Coordinator   Non-Minimum Position Eliminated   Non-Minimum Position Eliminated   Contract Medical Personnel   Non-Minimum Position Eliminated   Dose Recorders   Non-Minimum Position Eliminated   OSC Recorder   OSC REF Communicator   Title Change   Non-Minimum Position Eliminated   OSC Status Board Keeper   Non-Minimum Position Eliminated   OSC Document Control   Personnel   Non-Minimum Position Eliminated   Personnel   OSC Security Officer   Non-Minimum Position Eliminated   Non-Minimum Position Eliminated   FOF   Personnel   Soft (Hot Ring Down)   Minimum Staff Position Eliminated   Soft (Hot Ring Down)   Minimum Staff Position Eliminated   Soft (Hot Ring Down)   Sos Assessment Coordinator   EOF Dose Assessor   Title Change   FMT Technician   Moved to EOF From OSC RP   Personnel   FMT Driver   Moved to EOF From OSC RP   Personnel   FMT Driver   Moved to EOF From OSC RP   Personnel   EOF Supervisor   Admin Coordinator   Title Change   Minimum Staff Position Eliminated   EOF Supervisor   Admin Coordinator   Title Change   Tit			
Mechanical Coordinator   Non-Minimum Position Eliminated			
Electrical/I&C Coordinator Contract Medical Personnel Dose Recorders Materials Management Personnel OSC Recorder OSC Recorder OSC RP Communicator OSC Status Board Keeper OSC Status Board Keeper OSC Security Officer Personnel OSC Security Officer Recovery Manager RM Operations Advisor Dose Assessment Coordinator Dose Assessment Coordinator  EOF Dose Assessor FMT Driver  FMT Driver  DCS/ERDADS Operator Emergency Security Manager EOF RP Manager EOF RP Manager  EOF RP Communicator  Dose Assistant to the RM ENS Communicator  EOF RP Manager  EOF RP Coordinator  EOF RP Coordinator  EOF Supervisor Technical Assistant to the RM ENS Communicator  EOF RP Coordinator  FMT Driver  FMT Conmunicator  Changed from non-minimum to minimum staff ERO position Eliminated  Non-Minimum Position Eliminated  Changed from non-minimum to minimum staff ERO position/  Title Change  Field Monitoring Coordinator  Field Monitoring Recorder  Non-Minimum Position Eliminated  Non-Minimum Position Eliminated			
Contract Medical Personnel   Non-Minimum Position Eliminated			
Dose Recorders   Non-Minimum Position Eliminated Materials Management Personnel   Non-Minimum Position Eliminated OSC Recorder   OSC ERF Communicator   Title Change   Non-Minimum Position Eliminated OSC Status Board Keeper   Non-Minimum Position Eliminated OSC Document Control   Non-Minimum Position Eliminated Non-Minimum Position Eliminated OSC Document Control   Non-Minimum Position Eliminated Personnel   Non-Minimum Position Eliminated OSC Security Officer   Non-Minimum Position Eliminated OSC Security Officer   Non-Minimum Position Eliminated OSC Security Officer   Title Change   Non-Minimum Staff Position Eliminated OSC Security Manager   EOF Manager   Title Change   Minimum Staff Position Eliminated OSC (Hot Ring Down)   Minimum Staff Position Eliminated OSC Security Minimum Staff Position Eliminated OSC Security Moved to EOF From OSC RP Personnel   Non-Minimum Staff Position Eliminated OSC Security Manager   Minimum Position Eliminated OSC Security Manager   EOF RP Coordinator   Title Change Security Mon-Minimum Position Eliminated OSC Security Manager   EOF RP Coordinator   Changed from non-minimum to minimum staff ERO position/ Title Change   Field Monitoring Coordinator   Non-Minimum Position Eliminated   Field Monitoring Recorder   Non-Minimum Position Eliminated   Non-Minimum Position Eliminated   Field Monitoring Recorder   Non-Minimum Position Eliminated   Non-Minimum Position Eliminated   Field Monitoring Recorder   Non-Minimum Position Eliminated   Non-Minimum Position Elimina			
Materials Management Personnel OSC Recorder OSC Recorder OSC RP Communicator OSC RP Communicator OSC Status Board Keeper OSC Status Board Keeper OSC Security Officer Recovery Manager RM Operations Advisor S/C (Hot Ring Down) Communicator Dose Assessment Coordinator FMT Driver  EMT Driver  EMT Driver  EOF Supervisor  EOF Supervisor  Admin Coordinator  EOF Supervisor  Admin Coordinator  EOF RP Coordinator  Recovery Manager  EOF Dose Assessor  Title Change Minimum Staff Position Eliminated Minimum Staff Position Eliminated  EOF Personnel  Moved to EOF From OSC RP Personnel  BOCS/ERDADS Operator  EMET Driver  Moved to EOF From OSC RP Personnel  DCS/ERDADS Operator  EMINIMUM Staff Position Eliminated  EMINIMUM Staff Position Eliminated  EMINIMUM Staff Position Eliminated  EMINIMUM Staff Position Eliminated  EOF Supervisor  Admin Coordinator  Title Change  Technical Assistant to the RM  EOF RP Manager  EOF RP Coordinator  FOR P Manager  EOF RP Coordinator  Field Monitoring Coordinator  Field Monitoring Coordinator  Field Monitoring Recorder  Non-Minimum Position Eliminated  Field Monitoring Recorder			
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Field Monitoring Recorder Non-Minimum Position Eliminated			
Field Monitoring Recorder Non-Minimum Position Eliminated			
			Non-Minimum Position Eliminated
			Non-Minimum Position Eliminated

Current E-Plan / Procedures	Proposed E-Plan	Disposition
TSC Communicator		Non-Minimum Position Eliminated
County EOC Technical Advisor	County Liaison	Title Change
State EOC Technical Advisor	State Liaison	Title Change
	Resource Coordinator	Non-Minimum Position Added
JIC		
Emergency Information Manager	Site JIS Manager	Title Change
Site JIC Manager	Site JIS Coordinator	Changed from non-minimum to
		minimum staff ERO position/
		Title Change
JIC Technical Advisor	JIS Technical Liaison	Title Change
PIO/ECT Officer	Media Coordinator	Title Change
Corporate JIC Manager	Remote JIS Manager	Title Change
Nuclear Information Staff	Emergency Communications	Title Change
	Team	

Note: Shaded positions are non-minimum staff ERO positions.

Each EP task assigned to the minimum and non-minimum staff ERO positions in the current emergency plan is evaluated and dispositioned in the ERO Task Analysis.

			NUREG-	0654 R	2	С	urrent P	TN E-PI	an	Proposed Common E-Plan		
			Alert	Alert	SAE		Alert	Alert	SAE	-	Alert	Alert
Function	Position Title	Shift	60 Min	90 Min	60 Min	Shift	30 Min	60 Min	60 Min	Shift	60 Min	90 Min
	Unit Supervisor					2						
Plant Systems	Reactor Operator					3						
Operations	Nuclear Operator					4						
	Assistant Nuclear Operator					1						
0	Shift Manager	1				1				1		
Command and Control / Facility	Site Emergency Director (TSC)		1					1				1
Management	EOF Manager (EOF)				1				1			1
Management	TSC Supervisor (TSC)							1				
<b>-</b>	Shift Classification Advisor	1(a)								1(a)		
Emergency Classifications	TSC Classification Advisor (TSC)		1					1				1
Ciassifications	RM Operations Advisor (EOF)								1			
	Shift Communicator	1(a)				1(a)				1(a)		
Communications	ORO Communicator (TSC)		1				1					1
Communications	ENS Communicator (TSC)		1					1				1
	ORO Communicator (EOF)				1				1			
	Shift Manager	1(a)								1(a)		
Supervision RP Activities	TSC RP Coordinator (TSC)		1					1				1
Activities	EOF RP Coordinator (EOF)				1							1
Dediction Ductoction	RPT	2	3	3		2	5	3		1		3
Radiation Protection	RPT RP Qualified Individual							•		1		2
	Shift Dose Assessor	1(a)								1(a)		
Dose Assessments /	Remote Dose Assessor (Remote)		1				1				1	
Projections	EOF Dose Assessor (EOF)				1				1			1
	Onsite FMT Technician		1									
Field Monitoring	Onsite FMT Driver		1									
Teams	Offsite FMT Technician (EOF)		1	1			2	2				2
	Offsite FMT Driver (EOF)		1	1								2

			NUREG-	-0654 R	2	C	urrent P	TN E-PI	an	Propose	d Commo	n E-Plan
			Alert	Alert	SAE		Alert	Alert	SAE		Alert	Alert
Function	Position Title	Shift	60 Min	90 Min	60 Min	Shift	30 Min	60 Min	60 Min	Shift	60 Min	90 Min
	Lead OSC Supervisor (OSC)		1					1				1
Supervision of Repair Team Activities	FIN Supervisor (OSC)							1				1
	Electrical Supervisor (OSC)			1								
	Mechanical Supervisor (OSC)			1								
	I&C Supervisor (OSC)			1								
	RP Supervisor (OSC)			1								
	Maintenance Manager (TSC)							1				
	Chemistry Supervisor (TSC)							1				
	Electrician (OSC)		1				1	1				1
Repair Team	Mechanic (OSC)		1					2				1
Activities	I&C Technician (OSC)			1			1					1
	Chemistry Technician (OSC)							1				
	STA	1(a)				1		1		1(a)		
	Emergency Technical Mgr. (TSC)							1				
Engineering and	Electrical/I&C Engineer (Remote)		1					1			1	
Plant Monitoring	Mechanical Engineer (Remote)		1					1			1	
	Reactor Engineer (Remote)		1				1				1	
	DCS/ERDADS Operator (EOF)								1			
	Security Shift Supervisor						1					
Coourity	Security Force	(b)				(b)				(b)		
Security	Security Liaison (TSC)		1					1				1
	Emergency Security Manager (EOF)								1			
Media Information	JIS / JIC Staff		(c)		(c)						(c)	
	Site JIS Manager (Site)							1				1(c)
	Site JIS Coordinator (Site)											1(c)
	Remote JIS Manager (Remote)											1(c)
Information	IT Coordinator (TSC)			1								(d)
Technology (IT)	IT Coordinator (EOF)				1							(d)
ERO Totals – Full Breakdown		3	20	11	5	14	12	24	6	4	4	26
ERO Totals – On-shift and Minimum Staffing		3		36		14		42		4	3	0
ERO Totals – All Required Positions Filled			39			56				34		
	11 ( 1 1 C B C											

- (a) These positions are collateral duties. Positions assigned to the collateral duties can perform their assigned tasks without overlap or overburden.
- (b) Per the site Security Plan.
- (c) JIS function established at this point. Activation of the JIC is coordinated with the offsite agencies and carries no time requirement.
- (d) IT personnel monitor critical digital assets remotely and respond any time an issue is identified.

# **ENCLOSURE 9**

**Seabrook Station** 

**Analysis Report #2** 

**ERO Key Function and Augmentation Analysis** 

(74 pages follow)





Seabrook Station (SBK)

# Analysis Report #2 ERO Key Function and Augmentation Analysis

12/09/22

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#### 1.0 INTRODUCTION

NextEra has developed the proposed emergency plan using the NUREG 0654/FEMA-REP-1, Revision 2 (NUREG-0654 R2). This analysis was conducted to identify and justify deviations to the proposed Emergency Response Organization (ERO) from the current emergency plan and alternative approach to the NUREG-0654 R2 guidance.

The NRC has provided Technical Basis for The Proposed Guidance in NUREG-0654/FEMA-REP-1, Section II.B, "Emergency Response Organization" to assist licensees in their development of site-specific staffing plans, particularly when the licensee may want to develop an alternative approach. The technical basis document contains information regarding;

- the importance of each key function for effective emergency response.
- the basis for the positions and number of responders selected to fulfill those functions.
- the basis for the augmentation times to relieve on-shift personnel of those functions.

Additionally, NRC has issued RIS 2016-10, License Amendment Requests for Changes to Emergency Response Organization Staffing and Augmentation.

The NRC 0654/FEMA-REP-1 Section II.B technical basis document and RIS 2016-10 were used in the development of the ERO key functional and augmentation analyses.

Summary of this analysis is contained in the License Amendment Request enclosures 1, 2, 3 and 4. The summary identifies the deviations and alternate approaches, reason for the changes, and the basis concluding that the proposed emergency plan continues to meet the planning standards in 10 CFR 50.47(b) and the requirements in Appendix E to 10 CFR Part 50.

# 1.1 REGULATORY REQUIREMENTS

The planning standards in 10 CFR 50.47(b) establish the requirements that the onsite and offsite emergency response plans must meet for the NRC staff to make a finding that there is reasonable assurance that the licensee can, and will, take adequate protective measures in the event of a radiological emergency. The capabilities of on-shift and augmented ERO staffing are addressed under the following regulations:

- 10 CFR 50.47(b)(2) states, "On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified."
- 10 CFR 50.47(b)(9), states, "Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use."
- 10 CFR 50.47(b)(11), states, in part, "Means for controlling radiological exposures, in an emergency, are established for emergency workers...."
- Appendix E to 10 CFR Part 50, "Emergency Planning and Preparedness Production and Utilization Facilities," Section IV, Part A, "Organization," states, in part, "The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization...."

#### 1.2 GUIDANCE

NUREG-0654 R2, Section II, "Planning Standards and Evaluation Criteria," Evaluation Criteria II.B. addresses the Emergency Response Organization planning standard 10 CFR 50.47(b)(2) and the applicable sections of Appendix E to CFR Part 50. Evaluation Criterion II.B.3 specifies:

A table is developed depicting the site-specific on-shift staffing plan, as well as the ERO staffing augmentation plan. Table B-1, "Emergency Response Organization (ERO) Staffing and Augmentation Plan," provides a model for licensees to consider.

The NUREG-0654 R2 Table B-1 lists the Emergency Preparedness functions and augmentation times needed to Implement the typical emergency plan. The table is a model to be considered in the development of a site-specific emergency plan.

NextEra has developed the proposed emergency plan based upon based upon NUREG-0654 R2, Evaluation Criteria II.B.5 for minimum ERO on-shift and augmentation staff. The proposed ERO staffing plan contains an alternate approach which was evaluated using the functional area analysis of NUREG-0654 R2 and as much as possible a performance-based approach.

Along with evaluating the proposed ERO plan, this analysis report makes available sufficient bases and information for the NRC staff to evaluate whether the proposed alternative methods meet the intent of the regulatory planning standards and does not relax the regulatory planning standards.

The alternative methods are based upon the precedence of previously approved license amendment requests referenced in the document and others are considered first-of-a-kind (FOAK) methods.

#### 2.0 DEVIATION SUMMARY

# 2.1 ERO Key Function Analysis

The ERO Key Function Analysis compares and evaluates the current emergency plan on-shift and minimum staff ERO positions against those in the proposed emergency plan and in NUREG-0654 R2 guidance. Staffing deviations in the proposed emergency plan from the current emergency plan and NUREG-0654 R2 are categorized as potential RIEs and evaluated to determine whether the capability to perform the function is sustained (no degradation or loss of function).

Refer to Attachment 1, ERO Staffing Plan Comparison Table, for a side-by-side summary of staffing and augmentation comparison between NUREG-0654 R2 Table B-1, the current emergency plan, and the proposed emergency plan.

The Key Function Analysis establishes that no degradation or loss of function, or misalignment or loss of task assignment would occur as a result of any change made to the on-shift and minimum augmenting ERO positions. This alternate staffing approach continues to support timely and effective performance of the Major Functional Areas and Major Tasks listed in NUREG-0654 R2 Table B-1.

# 2.1.1 [Potential RIE 1-1] No EOF Director/ED Position

The proposed emergency plan does not assign an EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level for the Command and Control function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Command and Control function from two (2) to one (1).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

For a SAE ECL, or greater, these functions (or a subset of them), typically those associated with protective action recommendations (PARs), should be assigned to an Emergency Director located in the EOF....

The NextEra TSCs and EOFs are activated at an Alert emergency classification level. By activating both the TSC and EOF at an Alert emergency classification level and maintaining the non-delegable tasks of classification, notification, and PARs in the TSC, the proposed emergency plan does not need to provide additional augmenting ERO positions to move those tasks between emergency response facilities.

An EOF Emergency Director minimum staff ERO position is not needed at the Site Area Emergency classification level as the Command and Control function, along with all non-delegable responsibilities, are transferred from the Shift Manager to the Site Emergency Director at the Alert emergency classification level and remain in the TSC throughout a declared emergency. This change in the proposed emergency plan simply retains the Command and Control function in the TSC with the Site Emergency Director.

#### 2.1.2 [Potential RIE 1-2] No EOF ORO Communicator Position

The proposed emergency plan does not provide an EOF ORO Communicator minimum staff ERO position at the Site Area Emergency classification level for the Communications function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the ORO aspect of the Communications function from two (2) to one (1).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing quidance states that:

This function should consist of 2 staff members to fulfill the communication needs, at a minimum: 1 for the NRC and 1 for ORO notification and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee. These are typically located in the TSC. For an SAE ECL, or greater, at least 1 additional communicator should be staffed in the EOF.

NUREG-0654 R2 guidance designates the Offsite Response Organization (ORO) (State/County) communication location as 'typically' in the TSC based on staggered activation of the emergency response facilities.

The NextEra TSCs and EOFs are activated at an Alert emergency classification level. By activating both the TSC and EOF at an Alert emergency classification level and maintaining the non-delegable tasks of classification, notification, and PARs in the TSC, the proposed emergency plan does not need to provide additional augmenting ERO positions to move those tasks between emergency response facilities.

An EOF State/County Communicator minimum staff ERO position is not needed at the Site Area Emergency classification level as the Communications function for the ORO remains in the TSC throughout a declared emergency. This change in the proposed emergency plan simply retains the Communications function for the ORO in the TSC.

# 2.1.3 [Potential RIE 1-3] On-shift RP Personnel Allowed Collateral Duties

The proposed emergency plan allows collateral duty assignments to be given to radiation protection personnel when performing the Radiation Protection function. Specifically, this change allows radiation protection personnel to perform the Dose Assessment /Projections function and support other on-shift actions when not assigned a response activity.

This change deviates from the NUREG-0654 R2 on-shift staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

The ability to provide radiological expertise when the plant is experiencing an event with serious radiological consequences is crucial, due to the unknown radiological environment faced by emergency workers, particularly at the onset of the event. This function should be staffed by 2 qualified RP staff members on-shift (or 1 per unit for multi-unit sites). These staff members should not have any collateral duties during emergency response.

Consistent with NUREG-0654 R2, the proposed emergency plan assigns the Dose Assessments / Projections as a collateral duty. This emergency response collateral duty can be assigned to any on-shift individual qualified in Dose Assessment.

Personnel who are not ANSI qualified RPTs, such as an appropriately trained and qualified operator or a chemistry technician, may be assigned to the dedicated on-shift RPQI position. When the RPQI position is not filled by a qualified ANSI RPT, they cannot be given time sensitive or other tasks during emergency response that interfere with the Radiation Protection function.

#### 2.1.4 [Potential RIE 1-4] Fewer OSC RP Response Personnel

The proposed emergency plan reduces the number and qualifications of minimum staff ERO positions for the Radiation Protection function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Radiation Protection function from six (6) in the current emergency plan and in NUREG-0654, to five (5) in the proposed emergency plan, consisting of three (3) RPTs and two (2) RP Qualified individuals that are task trained but not required to be ANSI equivalent RPTs.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

While not all Alert ECLs (or lower) have radiological consequences, licensees should develop their ERO staffing plans for a worst-case scenario from a radiological risk perspective, i.e., an event which results in the immediate (within 60-minutes) loss of 2 or more fission product barriers leading to significant and unknown radiological conditions. The augmentation (support) of this position should occur in two stages: within 60 minutes of an Alert ECL or greater, 3 additional qualified RP staff should be available, and within 90 minutes of an Alert ECL, or greater, an additional 3 additional qualified RP staff should be available, and both are typically staffed in the OSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Personnel assigned to perform this function should be fully qualified HP technicians as described in ANSI/ANS-3.1-1993, "Selection, Qualification, and Training of Personnel for Nuclear Power Plants," that was approved for use by Regulatory Guide 1.8, "Qualification and Training of Personnel for Nuclear Power Plants."14 Personnel who are typically trained to a level of "meter qualified" to perform basic HP duties are not trained or do not have the necessary experience to perform complex HP duties, as discussed in HPPOS-0238, that would be necessary in a radiological emergency. For example:

- (1) Typically the training does not include providing HP coverage for other personnel.
- (2) Radiation protection is not normally incorporated into normal job duties.
- (3) Radiological conditions during an emergency may be unknown or rapidly changing.

The following emergency plan functions would constitute in-plant protective actions, which would require a fully qualified HP technician:

- Provide guidance for personnel protection to assist in minimizing personnel exposure.
- Provide guidance for exposure authorizations, dose guidelines, and postexposure assessments.

- Provide job coverage for in-plant repair and corrective actions, and operations support, under changing radiological conditions.
- Provide guidance for emergency decontamination of personnel, equipment, and facilities.
- Provide guidance for personnel contamination control and respiratory protection.

NUREG-0654 R1 lists the RPT functions assigned to the six augmenting OSC RPTs as:

- In-Plant Surveys
- HP coverage for repair, corrective actions, search, and rescue first aid & firefighting
- Personnel Monitoring
- Dosimetry
- Access Control

These functions have been reworded but remain similar in NUREG-0654 R2 as:

- Provide in-plant surveys
- Provide radiation protection coverage for responders accessing unknown radiological environments during emergency conditions
- Control dosimetry and control area access

The number of augmenting RPTs for the above functions in NUREG-0654 R2 Table B-1 has not changed from the number in NUREG-0654 R1 Table B-1.

The following guidance documents were considered in the staffing of augmenting ERO radiation protection personnel in the common emergency plan:

- Per RIS 2016-10, the licensee could show that the basis for the justification includes the availability of installed area, process, airborne and effluent radiation monitors, automated systems and information technology solutions, and enhanced work processes that would be available under accident conditions. Supporting tools and processes that may be considered include portal monitors, self-alarming dosimeters, and automated access control system for the radiologically controlled area (RCA) that maintain active radiation work permits, which are readily available if an emergency is declared (e.g., the system verifies qualifications, dose margins, and access requirements).
- Per HPPOS-238, Health Physics Technicians (HPTs) may independently perform specific tasks or job assignments if they meet the required prerequisites and complete the required task qualifications of their plant training programs. There are certain tasks and job assignments, however, that require in-depth knowledge and can only be performed by fully qualified ANSI technicians.

NextEra controls the qualification of the ERO as outlined in 10 CFR 50.47(b)(15). To ensure that qualifications are consistent throughout the fleet, the RPQI qualification requirements are maintained in Section O of the proposed emergency plan. The RPQI ERO personnel will be task qualified to the tasks listed in NUREG-0654 Rev. 2, Table B-2 (shown above)

This approach meets the intent of 50.47(b)(15) and allows the Systematic Approach to Training (SAT) process to determine and control the RPQI qualification requirements by task. The proposed emergency plan will utilize the SAT process to set the qualification requirements of the RPQI, independent of an ANSI 8.1 standard, while ensuring that all personnel are trained to be able to respond to an emergency – not to be a day-to-day RPT.

Per NUREG-0713, Occupational Radiation Exposure at Commercial Nuclear Power Reactors and Other Facilities 2004 and Draft Tables and Figures for 2020 NUREG-0713, the Average Measurable TEDE per individual has decreased from 0.31 rem (1995) to 0.09 rem (2020). Advances in technology in access control, electronic dosimetry (personnel monitoring and remote monitoring), pre-developed RWPs (for normal and for emergency conditions), and ARM/PRM plant computer information display systems reduce radiation protection personnel involvement in radiological activities and have contributed to the decrease.

- Dosimetry and access control is established using technological means to ensure that personnel wear the correct dosimetry into the radiological controlled area and are signed onto the RWP (affirming that they have read and understand the RWP). Telemetry with field communications and dosimetry can provide the RP personnel with all data that one would have previously needed equipment and multiple personnel to perform.
- On-shift and augmented ERO radiation protection coverage is monitored and provided by radiation protection personnel. The radiation protection personnel ensure that dispatched personnel are provided real time information on radiological conditions when deployed and if conditions change at the work location. In-plant radiological conditions are provided using technology available to the radiation protection personnel on the plant computer information display systems.

As this technology has become more integrated at NextEra sites and throughout the industry for normal and outage operations their use has become common-place. As such, radiation protection personnel that are properly trained on the technology outlined here are proficient with their use in emergency response functions. These enhancements would be used during a radiological emergency.

The OSC utilizes the day-to-day "Fix-It-Now" (FIN) Team concept, which includes radiation protection support as necessary. OSC minimum staffing requires 3 craft personnel. An RPT would monitor plant conditions remotely and assist the Lead OSC Supervisor with RP oversight activities while the other RP personnel (RPTs and RPQIs) could be tasked with providing coverage for craft personnel if a team is dispatched into a radiologically controlled area.

All NextEra sites are Pressurized Water Reactor (PWR) designs. There are fewer radiologically controlled areas at PWRs than at Boiling Water Reactor (BWR), which allows for less RP support staff during normal operations. Per Draft Tables and Figures for 2020 NUREG-0713, the Average Collective Dose per Reactor in 2020 is 31 person-rem at PWRs and 95 person-rem at BWRs. Even with a SG tube rupture using the main condenser as the cooldown medium, the turbine buildings will not be unmanageable with the responders as the major steps of each site's emergency operating procedures for a SG tube rupture will have completed their major functions of "identify – isolate – cooldown – depressurize – terminate safety injection" are expected to be complete prior to ERO arrival. All temperature control steps later in the procedures where the ERO may be present will be minimal temperature control steps which send minimal additional contaminated steam into the secondary systems. As the limiting accident that will expand radioactively controlled/ contaminated areas outside of the radiologically

controlled area, there is no need to staff PWR sites at the same level outlined in the NUREG, which factored in BWR designs into their calculations for staffing levels.

The above statements support the position that Radiation Protection function can be performed by the four augmentation radiation protection personnel ERO positions.

# 2.1.5 [Potential RIE 1-5] No On-site Field Monitoring Team

The proposed emergency plan does not staff the onsite field monitoring minimum staff ERO position for the Field Monitoring Teams function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the onsite field monitoring aspect of the Field Monitoring Teams function from two (2) to zero (0).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

The ability to locate, monitor, and track a radioactive plume is important to ensure appropriate protective measures are taken in response to a radiological event. The ability to staff these teams before they may be needed (i.e., before a radiological release) greatly enhances the ability of the licensee to provide timely and accurate PARs.

- An onsite FMT should be staffed, consisting of a monitor and a driver. This onsite FMT is responsible for radiological monitoring of the site's Protected Area. ...
  - i. The monitor should be qualified to assess radiation and contamination levels but need not be an ANSI qualified RP Technician as long as the FMT is under the direct supervision of senior staff in the TSC or EOF.
  - iii. The driver should be knowledgeable about the vehicle and the proposed routes to be traversed.

NUREG-0654 R2 Table B-1 guidance for augmenting Field Monitoring Team staffing has not changed from NUREG-0654 R1 (six total personnel) despite the technology (equipment and communications) and process advancements in the last 40+ years.

NUREG-0654 R2 designates one on-site (including inside of the Protected Area) Field Monitoring Team and one off-site Field Monitoring Team responding in 60 minutes to be ready to respond to a radiological release or to detect the radiation in the field thus confirming and quantifying a release. A second off-site Field Monitoring Team responding in 90 minutes is added to back up the first off-site Field Monitoring Team.

#### On-site Field Monitoring Team Driver ERO Position

On-site survey and sampling activities are performed without a vehicle since the site Protected Area boundaries are relatively small and plume tracking is not applicable. The Protected Area can be easily and efficiently traversed on foot or in a utility vehicle. The survey equipment is portable and does not require two individuals for transport or operation. Thus, there is no need for an on-site Field Monitoring Team Driver.

### On-site Field Monitoring Team Technician ERO Position

The current emergency plan utilizes two Field Monitoring Teams, primarily assigned to monitor conditions outside the Protected Area. NextEra typically uses an individual from the pool of OSC radiation protection personnel to perform on-site out-of-plant (inside the Protected Area) surveys if needed. However, one of the two Field Monitoring Teams may be called upon to enter the Protected Area to perform surveys when OSC radiation protection personnel are assigned other tasks.

For NextEra stations, two Field Monitoring Teams are sufficient to perform on-site and off-site field monitoring activities. All NextEra sites are located on major bodies of water (their EPZs being approximately 40% water or greater) with no requirements nor capabilities for monitoring activities on these bodies of water. As each site's EPZ is ~40+% water, there is not as much area to cover for the field monitoring teams. With NextEra EPZs being effectively smaller than landlocked sites, less personnel are needed to cover an effectively smaller EPZ.

Additionally, the NUREG-0654 R2 technical basis for the ERO staffing guidance includes the following clarification:

The onsite FMT should not be staffed if the radiological conditions jeopardize the safety of the FMT, typically after a Site Area Emergency has been declared.

Based upon NRC guidance two Field Monitoring Teams are sufficient to monitor radiological conditions after a SAE is declared. By not designating onsite and offsite FMTs, a total of two FMTs can sufficiently provide radiological monitoring at NextEra stations under all conditions.

### 2.1.6 [Potential RIE 1-6] No OSC RP Supervisor Position

The proposed emergency plan does not include an OSC RP Supervisor minimum staff ERO position to the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

An ... RP Supervisor should be staffed within 90-minutes of an SAE ECL, or greater, and is typically staffed in the OSC. The OSC Supervisor can effectively manage the craft [personnel] resources for the additional 30-minutes prior to the [supervisory] respond, as demonstrated through drills and exercises, without compromising the staff's reasonable assurance finding in accordance with 10 CFR 50.47(a).

The Lead OSC Supervisor is assigned the RP aspect of the Supervision of Repair Team Activities. To ensure that Lead OSC Supervisor position can perform the RP supervision sub-function, their ERO training / qualification program will include previous RP Supervisor experience or will receive training to supervise RP emergency response tasks. See Section O of the proposed emergency plan for the description of the qualification of the Lead OSC Supervisor.

OSC radiation protection personnel responding to the event will report to the Lead OSC Supervisor. With 3 RPTs and 2 RPQIs responding, an RPT can assist the Lead OSC Supervisor and FIN Supervisor with coordination of RP activities needed to dispatch OSC teams, thus not overburdening the Lead OSC Supervisor. If there is a particular question for RP supervision, the TSC RP Coordinator would also be available to answer or coordinate a response to questions.

#### 2.1.7 **[Potential RIE 1-7]** Single Craft Supervisor Position

The proposed emergency plan does not assign OSC maintenance supervisors for each craft. Specifically, this change reduces the number of OSC craft supervisor minimum staff ERO positions used for the Supervision of Repair Team Activities function from three (3) to one (1).

This change deviates from the NUREG-0654 R2 minimum staff ERO guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

An Electrical Supervisor, a Mechanical Supervisor, an I&C Supervisor ... should be staffed within 90-minutes of an SAE ECL, or greater, and is typically staffed in the OSC. The OSC Supervisor can effectively manage the craft [personnel] resources for the additional 30-minutes prior to the [supervisory] respond, as demonstrated through drills and exercises, without compromising the staff's reasonable assurance finding in accordance with 10 CFR 50.47(a).

The FIN Supervisor fills the supervisor role for mechanical, electrical and I&C craft disciplines. This is a deviation from NUREG-0654 R2 guidance which only discusses combining Electrical and I&C supervisory roles.

The current SBK ERO allows for the management of craft personnel under a single supervisor hierarchy. The position of FIN Supervisor is filled by management and supervisory personnel from the Maintenance Department who is assigned, during ERO activation, with direction of all disciplines within the department. OSC performance under this organizational structure has been demonstrated in numerous evaluated exercises and remains consistent with the acceptable OSC staffing hierarchy of the current Emergency Plan.

#### 2.1.8 [Potential RIE 1-8] No Shift Personnel Assigned to Repair Activities

The proposed emergency plan does not assign an on-shift ERO position (assigned this function if no collateral duties are assigned) to the Repair Team Activities function. Specifically, this change reduces the overall number of on-shift staff ERO positions used for the Repair Team Activities function from one (1) to zero (0).

This change deviates from the current emergency plan on-shift staff ERO position requirements.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO guidance states that:

Revision 1 of NUREG-0654/FEMA-REP-1 did not describe why maintenance personnel were expected to be on-shift. This has led to issues related to consistency in interpretation and the expected qualification of these personnel, primarily on-shift. The NRC has determined that, from an EP perspective, the ability to get emergency core cooling system (ECCS) equipment operational was the primary basis for necessitating maintenance expertise while on-shift. Maintenance staff expertise may be advantageous for licensees to consider for other reasons, and at their discretion; however, for the purposes of NUREG-0654/FEMA-REP-1, the only area where maintenance availability should typically be necessary on-shift is for ECCS issues. However, a licensee's ECCS is designed to be redundant and diverse such that common mode failures are very unlikely. As a result, the need to accommodate maintenance functionality on-shift is unnecessary.

Maintenance personnel are not required for the operation of the ECCS or other safety related systems. Minor repairs (such as reset breakers, replace fuses, lubricate equipment, install spool piece, etc.) are performed by on-shift operations personnel qualified to perform the actions as part of normal, abnormal and emergency operating procedure activities. Major repair activities are not necessary to support the emergency operations procedures which ensure the plant can be placed in a safe shutdown condition.

Use of maintenance personnel for beyond design basis tasks, such as FLEX and/or SAMG activities, is documented and controlled outside the scope of the emergency preparedness program and are governed under other applicable regulations and guidance.

Use of maintenance personnel for fire brigade or rescue activities are outside the scope of the emergency preparedness program and are governed under other applicable requirements, such as the site fire protection plan and technical specifications for that function.

Maintenance personnel are not trained or used to performing EP functions (such as offsite communications). Emergency Plan Implementing Procedures (EPIPs) do not assign any on-shift response actions to maintenance personnel.

No functional changes have been made to the on-shift staff ERO positions for the Repair Team Activities function.

### 2.1.9 [Potential RIE 1-9] Fewer Craft Responders

The proposed emergency plan reduces the number of Electrical Maintenance from two (2) to one (1) and Mechanical Maintenance from two (2) to one (1) minimum staff ERO positions to the Repair Team Activities function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Repair Team Activities function from five (5) to three (3).

This change deviates from the current emergency plan minimum staff ERO position requirements.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

A minimum number of maintenance personnel should respond to an event as part of the ERO, with more personnel available on an as-needed basis depending on the event. The augmentation (support) of the electrician and mechanic positions should occur within 60-minutes of an Alert ECL, (or greater), and is typically staffed in the OSC. The augmentation (support) of the I&C position should occur within 90-minutes of an Alert ECL, or greater, and is typically staffed in the OSC.

Maintenance personnel are not assigned specific ERO response tasks in the proposed emergency plan. Maintenance personnel designated as minimum augmenting ERO are used as needed for skill of craft tasks.

Staffing for events which involve extensive damage has been analyzed in accordance with NEI 12-01 and are addressed under FLEX requirements.

This change is consistent with the staffing plan of NUREG-0654 R2.

#### 2.1.10 [Potential RIE 1-10] Fewer JIC Support Staff

The proposed emergency plan reduces the number of JIC Support Staff from three (3) to one (1) Site JIS Coordinator minimum staff ERO positions for the Media Information Activities function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Media Information function from six (6) to three (3).

This change deviates from the current emergency plan minimum staff ERO position requirements.

**Deviation Justification:** The proposed emergency plan provides a minimum staff complement of three (3) dedicated ERO positions to coordinate with non-ERO corporate communications personnel and perform activities related to the Media Information function.

The NextEra Corporate Communications and key business units maintain a staff to operate a Joint Information System (JIS) for day-to-day operations and at all emergency classification levels. The NextEra Corporate Communications and key business units respond to media and public inquiries for abnormal conditions and events at any declared emergency classification level. The NextEra Corporate Communications and key business units coordinate with site management and ERO personnel, when staffed, to respond to media inquiries. Press releases are issued as appropriate from NextEra Corporate Communications and key business units.

### 2.1.11 [Potential RIE 1-11] No IT Technician ERO Positions

The proposed emergency plan does not assign IT Technicians in the TSC and EOF/JIC. Specifically, this change reduces the number of IT Technicians minimum staff ERO positions used for the Information Technology function from two (2) to zero (0).

This change deviates from the NUREG-0654 R2 minimum staff ERO guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO staffing guidance states that:

Advances in technology have led to significant enhancements in many areas of emergency response, such as communications, monitoring, displays, digital procedures, etc. Licensees should consider the use of this technology whenever it enhances their ability to protect the health and safety of the public. However, if the implementation of the emergency plan is so reliant on this technology that without it, the emergency plan could not be implemented, then an IT Lead should augment (support) the response within 60-minutes of an Alert ECL, or greater, if the TSC/OSC has this technology; and within 60-minutes of an SAE ECL, or greater, if the EOF or JIC/JIS has this technology. If the licensee has capable backup plans for if/when this technology fails, then this function is not necessary. In other words, if the ERO is reliant upon technology such that its loss would prevent the ERO from functioning, then a support position should be part of the ERO to assist in recovery of this technology. If the loss of this technology would lead to the implementation of backup strategies, then this position would not need to be part of the ERO and can be called upon as-needed. Licensees should consider using the listing of critical digital assets, identified in accordance with 10 CFR 73.54, as the basis for determining if this position should be considered part of the EROs augmented response.

Per NUREG-0654 R2, minimum staff ERO IT positions are only required to be described in the emergency plan if critical digital assets (CDAs) are identified per 10 CFR 73.54, Protection of digital computer and communication systems and networks. The proposed emergency plan relies on DCS/ERDADS for monitoring plant parameters, which has been determined to be a CDA. The IT process for addressing issues with CDAs operates full time outside the emergency plan on a 24/7 basis. Additionally, NextEra maintains an IT Help Desk 24 hours per day, 7 days a week. Many computer issues are addressed remotely with an IT specialist through the Help Desk.

Each of the EP related digital assets were evaluated as part of implementation of the Cyber Security Rule, 10 CFR 73.54(b). Under NEI 13-10, "Cyber Security Control Assessments," EP Critical Digital Assets have been assessed and controls have been put in place to protect the assets against cyber-attack. In conjunction with these controls, alternate administrative, non-digital, or adequately independent means have been put in place for performing each EP function, should the digital component or program fail.

Performance of digital equipment used by EP has shown to be acceptable during drills and exercises, and through routine inventory and surveillance checks. Performance of digital assets is monitored through either the Corrective Action Program (CAP) or the drill and exercise critique process. Performance trends are monitored, corrective actions are issued, and compensatory measures are taken as necessary.

With the IT department process for 24/7 coverage and built-in redundancy for communication systems and digital EP assets, NextEra has identified that there is no need to maintain an IT Technicians as minimum staff ERO positions.

# 2.2 **ERO Augmentation Analysis**

**Note:** Discussion around the technology Emergency Response Notification for Incidents and Events (ERNIE) are written in the future present tense throughout this document. The system is not installed at this facility currently but will be as part of the installation of the Common Emergency Plan.

The ERO Augmentation Analysis compares and evaluates the current emergency plan on-shift and minimum staff ERO positions against those in the proposed emergency plan and in NUREG-0654 R2 guidance. Augmentation deviations in the proposed emergency plan from the current emergency plan and NUREG-0654 R2 are categorized as potential RIEs and evaluated to determine whether the timeliness to perform the function is sustained without overburden of the on-shift staff.

Refer to Attachment 1, ERO Staffing Plan Comparison Table, for a side-by-side summary of staffing and augmentation comparison between NUREG-0654 R2 Table B-1, the current emergency plan, and the proposed emergency plan.

NUREG-0654 R2 establishes 60 and 90 minute minimum staff ERO augmentation time requirements for the TSC and OSC positions at the Alert emergency classification level; and a 60 minute minimum staff ERO augmentation time requirement for the EOF at the Site Area Emergency classification level.

The current emergency plan follows a 60 minute augmentation scheme as approved by the NRC in 1989 with the following main elements:

- All ERO personnel are notified at the Unusual Event emergency classification level (response to facilities is elective for the Shift Manager).
  - Primary Responders dependent on their ERO position will either report to the site or remain at their current location

- Subject-to- Call and Secondary Responders are called out to respond to their assigned facility at the Alert emergency classification level.
- The TSC, OSC and EOF are required to be activated at the Alert emergency classification level.
- The JIC is activated as soon as possible at an Alert or higher emergency classification level when determined appropriate with the offsite agencies, and whenever the EOF is activated.

The proposed emergency plan follows a 60 and 90 minute augmentation scheme with the following main elements:

- All ERO personnel are notified at the Unusual Event emergency classification level (response to facilities is elective for the Shift Manager) and called out to respond to their assigned facility at the Alert emergency classification level.
- The TSC, OSC, EOF and Remote positions are activated at the Alert emergency classification level.
- NextEra implements JIS practices that are capable of performing the media information function at all emergency classification levels.
- The near-site JIC is activated when determined appropriate with the offsite agencies (at an Alert or higher emergency classification level).

The ERO augmentation analysis concludes that the differences in times between the proposed common emergency plan 60 and 90 minute response criteria and the NUREG-0654 R2 60 and 90 minute response criteria does not adversely delay turnover of responsibilities or negatively impact/overburden the ability of the on-shift personnel to perform operational actions or key functions. This alternate staffing approach continues to maintain initial facility accident response in all key functional areas at all times and provides timely augmentation of response capabilities.

#### 2.2.1 [Potential RIE 2-1] Site Emergency Director at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time for the Site Emergency Director minimum staff ERO position that performs the Command and Control function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

This function is typically assigned to the Operations Shift Manager (OSM). The augmentation (relief) of this position is intended to relieve the OSM of EP functions so that the OSM can focus on the event response from an operations perspective. This should occur within 60-minutes of an Alert ECL declaration, or greater, and is typically a position staffed within the TSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Per the guidance in NUREG-0654, Table B-1, an augmented "Senior Manager" should fulfill the "Emergency Operations Facility Director" major task at 60 minutes. A licensee requesting a change in staff augmentation requirements that would have the lead manager unavailable to assume command and control within 60 minutes of the initial emergency declaration should show that the on-shift staff includes enough qualified supervision such that one supervisor will assume the emergency director role. The licensee should show that the on-shift supervisor performing the manager actions will not have any additional duties (e.g., each unit under the direction of a unit supervisor, a shift manager providing oversight of the plant response, and a designated emergency director responsible for emergency plan implementation).

The Shift Manager is given overall command and control with regard to ERO response activities. The position is used to perform Emergency Classification Level (ECL) determinations and develop Protective Action Recommendations (PARs), and to direct or perform ORO notification.

Historically, actual events have resulted in single ECL declarations with no further escalation. Realistic event progression that challenges multiple fission product barriers is relatively slow as demonstrated by the events at TMI and Fukushima. In this case, immediate plant operations and ERO response actions occur with 60 minutes of actual events and the on-shift staff are not burdened (tested) with multiple classifications.

Planning for a wide range of events, including rapidly progressing severe accidents (RPSA) is also required. These "fast breaker" events rise to the SAE or GE classification level without progressing through the lower ECLs. In this case, immediate plant operations and ERO response actions occur with 60 minutes of the RPSA scenario, and the on-shift staff are not burdened (tested) with multiple classifications.

Event scenarios that require escalation of the ECL prior to ERO augmentation are included in drills and exercises for the on-shift ERO. Technology and process enhancements including communications (ERNIE), ERDS, EAL matrix, PAR flowchart, etc. have reduced the time and attention it takes to perform tasks along with enhancing the effectiveness and efficiency of task performance. In addition, NUREG-0654 R2 has added a Classification Advisor position to assist and work in coordination with the Shift Manager, which NextEra has included as a collateral duty in the on-shift complement.

All Initiating Conditions (ICs) need to be demonstrated within the 8-year cycle. All Unusual Event and Alert level ICs are preformed from the Control Room. Thus, the opportunities for the Shift Manager to demonstrate the ability to perform emergency and operations responsibilities are provided multiple times over the 8-year cycle.

The demonstration and evaluation of the Shift Manager to perform their emergency plan functions is continuously evaluated during emergency planning drills/exercises and operations training simulator sessions. Various scenarios are used to evaluate the Shift Manager's ability to perform the following emergency planning functions, technical specification responsibilities and operations oversight.

Operations training simulator sessions test and evaluate the Shift Manager's ability to effectively and efficiently perform all required functions / responsibilities until the event is stabilized (session is complete); this in some circumstances is greater than the 90 minutes ERO response time. Note – there is no minimum required length of time for the training sessions.

Licensed Operator Continuing (LOR) training periodically has scenarios that extend to 90 minutes without augmented ERO involvement. For example, a training scenario is performed on a periodic basis to ensure that a FLEX Beyond Design Basis External Event can be mitigated by the minimum on-shift staff. The FLEX scenario assumes that the ERO will not be on site to provide support for a minimum of 6 hours. While this is covered under 10 CFR 50.155 and not Appendix E, the example is given as a major event where augmented ERO response is not provided while the site compliment is under heavy demand for action to mitigate the event.

NextEra Energy has added a drill/exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for at least 90 minutes. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

The Site Emergency Director 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the Command and Control function.

On Shift impact of change from 60 to 90 minutes: The shift manager oversees site response until relieved. As outlined above, the Shift Manager is in oversight role of the plant operations at this point so any additional classifications or PAR decision making from degrading equipment is not an additional burden.

Due to the Shift Managers and Site Emergency Directors having the similar qualifications and similar backgrounds, the skillsets that the Site Emergency Directors bring with them are similar to those of the Shift Manager.

The (Emergency) Classification Advisor role on shift is also able to perform better as the principal assistant to the Shift Manager due to technological improvements outlined in their section below.

One function that the ERO may take on is the non-critical communications with offsite agency leadership if an event is in progress. These communications are predominantly clarification questions that take 1-3 minutes to answer as their ERO yet in place. This does not add a significant additional burden on the Shift Manager.

When the Site Emergency Director (SED) assumes command and control, the SED routinely involve the Shift Manager in all classification and PAR decision making for validation so the additional burden of stating the classification as it is coming from the SM vice from the TSC would not result in an overburden.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

#### 2.2.2 [Potential RIE 2-2] Classification Advisor at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC Classification Advisor minimum staff ERO position that performs the Emergency Classifications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this function should occur within 60-minutes of an Alert ECL. or greater, and is typically staffed in the TSC.

Maintaining the ability to perform this function at all times ensures that ECL decisions, and as applicable, the PAR decisions, are timely and accurate as these decisions have a direct relationship to public health and safety from the consequences of a radiological event. This function shall work in coordination with the OSM, or Emergency Coordinator, depending on which position is in command and control, and as a result should be available on shift and in the TSC.

The on-shift Classification Advisor is given a limited role with regard to ERO response activities. The position is used to second check Emergency Classification Level (ECL) determinations and Protective Action Recommendations (PARs) developed by the Shift Manager, and to support ORO notification information accuracy. The on-shift Classification Advisor has received training to perform their assigned EP functions and assist the Shift Manager with emergency responsibilities.

Historically, actual events have resulted in single ECL declarations with no further escalation. Realistic event progression that challenges multiple fission product barriers is relatively slow as demonstrated by the events at TMI and Fukushima. In this case, immediate plant operations and ERO response actions occur with 60 minutes of actual events and the on-shift staff are not burdened (tested) with multiple classifications.

Planning for a wide range of events, including rapidly progressing severe accidents (RPSA) is also required. These "fast breaker" events rise to the SAE or GE classification level without progressing through the lower ECLs. In this case, immediate plant operations and ERO response actions occur with 60 minutes of the RPSA scenario, and the on-shift staff are not burdened (tested) with multiple classifications.

Event scenarios that require escalation of the ECL prior to ERO augmentation are included in drills and exercises for the on-shift ERO. Technology, process and procedure enhancements to classification, notification and PAR development (such as Emergency Response Notification for Incidents and Events (ERNIE), ERDS, EAL matrix, PAR flowcharts, etc.) have simplified response activities and enhanced the effectiveness and efficiency of task performance. The on-shift Classification Advisor position's ability to perform second checks specifically benefits from these advancements such that continuation of their ERO related tasks from 60 to 90 minutes is not a burden.

All Initiating Conditions (ICs) need to be demonstrated within the 8-year cycle. All Unusual Event and Alert level ICs are preformed from the Control Room. Thus, the opportunities for the on-shift Classification Advisor to demonstrate the ability to perform emergency and operations responsibilities are provided multiple times over the 8-year cycle.

The demonstration and evaluation of the on-shift Classification Advisor to perform their emergency plan functions is continuously evaluated during emergency planning drills/exercises and operations training simulator sessions. Various scenarios are used to evaluate the on-shift Classification Advisor's ability to perform the following emergency planning functions, technical specification responsibilities and operations oversight.

Operations training simulator sessions test and evaluate the on-shift Classification Advisor's ability to effectively and efficiently perform all required functions / responsibilities until the event is stabilized (session is complete); this in some circumstances is greater than the 90 minutes ERO response time. Note – there is no minimum required length of time for the training sessions.

Licensed Operator Continuing (LOR) training periodically has scenarios that extend to 90 minutes without augmented ERO involvement. For example, a training scenario is performed on a periodic basis to ensure that a FLEX Beyond Design Basis External Event can be mitigated by the minimum on-shift staff. The FLEX scenario assumes that the ERO will not be on site to provide support for a minimum of 6 hours. While this is covered under 10 CFR 50.155 and not Appendix E, the example is given as a major event where augmented ERO response is not provided while the site compliment is under heavy demand for action to mitigate the event.

NextEra Energy has added a drill/exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for at least 90 minutes. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement for the TSC Classification Advisor minimum staff ERO position does not impact the capability or timeliness to perform the Emergency Classifications function or overburden the on-shift position.

On Shift impact of change from 60 to 90 minutes: The ECA position is the principal support to the Shift Manager or Site ED, depending on their location. The delay of the ECA arrival by an additional 30 minutes will have the Shift ECA performing the remote coordination support and ERNIE communications for the additional time. These functions are part and parcel to their function and practiced regularly.

The (Emergency) Classification Advisor role on shift as the principal assistant to the Shift Manager is enhanced due to technological improvements outlined above.

With the technological advances that ERNIE has given to the ECA, they are more able to provide co-equal level of knowledge and skill assistance to the Shift Manager for longer time periods due to them not being saddled with manual tasks of creating forms, briefing the shift communicator on the specific forms, and activating the ERO.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

### 2.2.3 [Potential RIE 2-3] ORO Communicator at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC ORO Communicator minimum staff ERO position that performs the State/County notifications aspect of the Communications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this position should occur within 60-minutes of an Alert ECL, or greater, and is intended to relieve the on-shift staff of this EP function. This function should consist of 2 staff members to fulfill the communication needs, at a minimum: 1 for the NRC and 1 for ORO notification and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

To adequately support the elimination or extension of the two 60-minute responders, the licensee should show that two on-shift positions are identified to fill the 60-minute responder's role to "Notify licensee, State, local and Federal personnel [and] maintain communication." The licensee should show that these positions are not assigned other tasks that may prevent the timely performance of their assigned notification or communication functions, as specified in the emergency plan. The licensee should discuss how communication technologies employed by the proposed on-shift staff will support timely, effective, and reliable notifications. Additionally, the communications technologies should be referenced in the emergency plan to ensure that future changes are reviewed using the RG 1.219 change process, as they were used as the basis for the proposed change.

Technology advancements of Emergency Response Notification for Incidents and Events (ERNIE) allows a streamlined process for ERO notification and ORO notification. Specifically, the technology advancements have enhanced initial notification to the ORO by using an electronic system that contacts the ORO warning points and emergency management staff via email, text and verbal computer-generated voice communications, thus eliminating the need for a communicator to perform the verbal portion of the initial notification.

ORO activation occurs from the site's warning points based upon the initial notification form information. The forms are negotiated and approved with OROs to provide information needed to make initial response decisions. As such, there should be minimal need for OROs to request additional information from the site communicators. ERNIE provides the site with validation that the information has been received by the OROs.

If any of the OROs need additional information prior to ERO activation (90 minutes), the NextEra control rooms are equipped with speaker and/or headset phones which aid them in the performance of the communication function. The technical advancement allows personnel to perform the communication task without negatively impacting the performance of other emergency plan or operations responsibilities.

NextEra Energy has added a drill/ exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for 90 minutes as a verification that the shift can perform their function with no assistance. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the State/County notifications aspect of the Communications function. The OROs concur with the NextEra Common Emergency Plan changes including the 90-minute ERO augmentation (refer to Enclosure 10).

On Shift impact of change from 60 to 90 minutes: The ORO communicator envisioned by NUREG-0654 R2 Table B1 was a manual intense process of reading off of paper notification forms and using one of many site telephone systems for external communications during the notification phase of an event. Additional functions would be communicating with state/county Emergency Operations Center staff to provide updates. As the (Emergency) Classification Advisor is responsible for ERNIE operations, they have taken on the below functions (via technology) of the ORO communicator:

- 1. ORO warning point call providing the warning point operators with information from the state/county notification form
- 2. Verification of message receipt.
- 3. Distribution of the notification form, usually by fax, to other ERO facilities and ORO warning points/EOCs

The offsite agencies receive annual training on EAL changes, so they know the basics of what the EALs are and what is on the notification forms.

One function that the ERO may take on is the non-critical communications with offsite agency leadership if an event is in progress. These communications are predominantly clarification questions that take 1-3 minutes to answer as their ERO yet in place. This does not add any significant burden on the shift staff. The timing of ORO response matches similarly to the site ERO response of 90 minutes. Each of the agencies have agreed to our 90 minute ERO response time as shown with the letters of support as part of the submittal.

If the offsite agency needs additional information, as discussed above, the control room can provide the information that is needed with minimum burden to the on-shift staff.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

### 2.2.4 [Potential RIE 2-4] ENS Communicator at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC ENS Communicator minimum staff ERO position that performs the NRC notifications aspect of the Communications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The augmentation (relief) of this position should occur within 60-minutes of an Alert ECL, or greater, and is intended to relieve the on-shift staff of this EP function. This function should consist of 2 staff members to fulfill the communication needs, at a minimum: 1 for the NRC and 1 for ORO notification and status updates. Additional communicators may be called upon as needed, and at the discretion of the licensee.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

To adequately support the elimination or extension of the two 60-minute responders, the licensee should show that two on-shift positions are identified to fill the 60-minute responder's role to "Notify licensee, State, local and Federal personnel [and] maintain communication." The licensee should show that these positions are not assigned other tasks that may prevent the timely performance of their assigned notification or communication functions, as specified in the emergency plan. The licensee should discuss how communication technologies employed by the proposed on-shift staff will support timely, effective, and reliable notifications. Additionally, the communications technologies should be referenced in the emergency plan to ensure that future changes are reviewed using the RG 1.219 change process, as they were used as the basis for the proposed change.

Technology advancements using continuous live ERDS transmission and Emergency Response Notification for Incidents and Events (ERNIE) allows a streamlined process for NRC notification. Specifically, the technology advancements have enhanced the NRC Headquarters Operations Office (HOO) initial notification by using an electronic system that contacts the HOO.

The shift communicator is able to communicate immediately, not to exceed 1 hour, with the NRC HOO to provide real time information and an open line if desired. The NextEra control rooms are equipped with speaker and/or headset phones which aid the shift communicator in the performance of the communication function. The technical advancement allows personnel to perform the communication task without negatively impacting the performance of other emergency plan or operations responsibilities.

This technology allows for a single communicator to perform as the NRC communicator and have collateral duties throughout the additional 30 minutes until relieved by the TSC ENS Communicator.

NextEra Energy has added a drill/exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for 90 minutes as a verification that the shift can perform their function with no assistance. This drill requires demonstration of classification, notification and PAR functions.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the NRC notifications aspect of the Communications function.

On Shift impact of change from 60 to 90 minutes: The shift communicator role is primarily responsible for communicating with the NRC in the NEE designed scheme. ORO communications are handled by ERNIE (technology) and the ECA as outlined above in this document.

The shift communicator will then follow up with the NRC (after ERNIE delivers the first message electronically) immediately (not to exceed) 1 hour to validate receipt of the information, answer and answer any additional questions. The communicator will be available on the open line with the NRC as they are in the process of determining their response model to the event. The shift communicator being on the open line with the NRC for an additional 30 minutes will prevent them from being added back into the response pool; this delay was validated during the staffing study as the communicator was used in their task for 120 minutes. All other shift staff were capable of responding with no delays.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

#### 2.2.5 **[Potential RIE 2-5]** TSC RP Coordinator at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC RP Coordinator minimum staff ERO position that performs the Supervision of Radiation Protection Staff and Site Radiation Protection function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

This function is important for effective emergency response to a radiological event because the management of RP resources, and the assistance this position provides the Emergency Coordinator, is crucial for response to radiological events. Radiological events can be very significant and constantly evolving, and require significant expertise in radiation and radiological consequences. The evaluation of radiological events, and the development of effective protective action recommendations, requires this expertise to support the Emergency Coordinator in making these decisions. This position is also responsible for the direction and protection of FMTs. The augmentation (relief) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed in the TSC.

The TSC Radiation Protection Coordinator relieves the Shift Manager of the Supervision of Radiation Protection Staff and Site Radiation Protection function.

On-shift radiation protection personnel respond to abnormal radiological conditions, including Area Radiation Monitor and Process Radiation Monitor alarms, in accordance with RP procedures and report their actions and information to the Shift Manager, with little or no required supervision. Other on-shift radiation protection personnel emergency functions/responsibilities are performed without the need for direct supervision of the Shift Manager.

Technology and process enhancements in radiation protection including dosimetry and personnel monitoring have reduced the on-shift RP task burden by allowing operations and other non-RP shift personnel to perform most activities without the need for dedicated RP coverage. Thus, the need for the Shift Manager to coordinate RP coverage activities is significantly reduced.

The 90-minute response for OSC maintenance and radiation protection personnel credits the enhancement of the NextEra FLEX equipment and strategies. By accounting for FLEX equipment and strategies that eliminate or prolong the onset of core damage and any radiological release of activity the RP challenges are simplified and the need for a 60 minute radiation protection personnel response, and thus a 60 minute Radiation Protection Supervision response is diminished. Coordination of RP supervision response time with full TSC and OSC augmentation provides for a less complicated transition of responsibilities.

NextEra Energy has added a drill/ exercise to the 8-year cycle to validate that an operating crew can perform an EP drill scenario without any assistance from the augmenting ERO for 90 minutes as a verification that the shift can perform their function with no assistance. This includes the Shift Manager directing and supervising RP functions and activities.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan does not impact the capability or timeliness to perform the Supervision of Radiation Protection Staff and Site Radiation Protection function.

On Shift impact of change from 60 to 90 minutes: The Shift Manager is overall responsible for the supervision of RP staff and site radiation protection function.

With the Site RP Coordinator filling both Table B1 roles of Site RP Coordinator and OSC RP Supervisor, this position has responsibility of providing direction to RP staff and will thus be filled with dayshift RP management, supervisors, analysts, and staff.

While these personnel do bring a skillset that is matched only by the RPT on shift, they do provide additional knowledge and experience that the shift manager may not have in their arsenal. To mitigate this issue, throughout the years emergency operations procedures have been enhanced by incorporation of the most recent revisions of PWR Owner's Group guidance, this has greatly aided the shift RP response to include specific direction on directing surveys and other RP functions. The AOP/EOP procedure sets have specific guidance for direction and control of RP/QI resources during an event. The shift manager has the authority to provide immediate dose extensions for life saving, facility saving, or prevention/mitigation of release. This decision is informed by the rest of the operating crew and procedure sets. This again is part and parcel of the SM requirements and is not an undue burden for the additional 30 minutes.

Performing a comparative task analysis (refer to Analysis 1) between the Shift Manager and the Site RP Coordinator, the tasks are same/ similar between the SM and SRPC. Where there is a gap is with experience. Experience cannot be mitigated with training as the knowledge requirements for the positions are same/ similar. Experience is mitigated through procedure use and adherence. As outlined above, all NEE sites have AOP/EOP sets that are based off most recent PWR Owner's guidance which incorporates industry best practices, including RP direction.

# 2.2.6 [Potential RIE 2-6] Radiation Protection Personnel at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the radiation protection personnel minimum staff ERO positions that perform the Radiation Protection function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for augmenting radiation protection personnel states that:

While not all Alert ECLs (or lower) have radiological consequences, licensees should develop their ERO staffing plans for a worst-case scenario from a radiological risk perspective, i.e., an event which results in the immediate (within 60-minutes) loss of 2 or more fission product barriers leading to significant and unknown radiological conditions. The augmentation (support) of this position should occur in two stages: within 60 minutes of an Alert ECL or greater, 3 additional qualified RP staff should be available, and within 90 minutes of an Alert ECL, or greater, an additional 3 additional qualified RP staff should be available, and both are typically staffed in the OSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Radiation protection personnel perform multiple roles during normal and emergency plant operations. These roles include access control, personnel monitoring, and dosimetry, in addition to HP coverage for repair and corrective actions, search and rescue, first aid, and firefighting during emergency response operations. Per the quidance in Table B-1 of NUREG-0654, there should be two augmented responders at 60 minutes for the major task of "Radiation Protection." To adequately support an extension in response timing of the two radiation protection 60-minute responders to 90 minutes, the licensee should show that the on-shift HP staffing includes as a minimum, four HP technicians in total for the site. The extra HP technicians are needed for in-plant protective actions for the other personnel added to the on-shift staffing to compensate for the extension in augmentation time, and to assess any offsite releases of radioactive materials. Additionally, the licensee request should demonstrate that on-shift HP technicians will be relieved of the need to perform access control, personnel monitoring, and dosimetry-related tasks, thereby freeing these personnel to cover vital response activities (e.g., HP coverage for repair and corrective actions, search and rescue, first aid, and firefighting). NRC staff will consider whether the basis for the justification includes the availability of installed area, process, airborne and effluent radiation monitors, automated systems and information technology solutions, and enhanced work processes. The licensee should include supporting tools and processes that will be considered such as portal monitors, self-alarming dosimeters, and automated access control systems for the RCA that maintain active radiation work permits that are readily available if an emergency is declared (e.g., the system verifies qualifications, dose margins, and access requirement).

Three (3) RP Technician and two (2) RP Qualified Individual 90-minute minimum staff ERO positions report to the Lead OSC Supervisor and provide radiation protection support.

Through equipment, process, and training enhancements the on-shift staff can initially respond to Design Basis and Beyond Design Basis (BDB) events without the support of an augmented ERO. As codified by 10 CFR 50.155, NextEra FLEX equipment provides the on-shift staff with additional resources when installed plant equipment is lost or damaged. Generally, FLEX provides portable backup equipment onsite that can be used to supplement or replace installed plant equipment in maintaining long-term core cooling, spent fuel cooling, and containment integrity. Movement of FLEX equipment, including installation into plant systems and its operations (electrical, fluid, etc.) is performed by on-shift personnel.

Due to the availability of FLEX equipment, NextEra stations have diverse protection against loss of ECCS capability and other systems, which provides a basis for determination that no immediate ECCS repair and corrective actions are likely necessary for on-shift personnel prior to augmentation of maintenance personnel. The FLEX/BDB process and equipment, and the operating emergency procedures (EOP, AOP, etc.) are designed to be implemented with the minimum shift staff. By accounting for FLEX equipment and strategies that eliminate or prolong the onset of core damage and any radiological release of activity the RP challenges are simplified and the need for a 60 minute radiation protection personnel response is diminished.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

On Shift impact of change from 60 to 90 minutes: Shift RP functions are designed around requirements in AOP/EOP procedures and validated against FLEX demands. With the RP/QI personnel on shift, this allows for multiple shift "teams" working in the Radiologically Controlled Area performing steps needed in the AOP/EOP procedures. Changing radiological conditions are an integral part of operations functions in these procedure sets and the operators are trained to expect those conditions as they are realigning systems. As the RP/QIs are matched with the number of teams needed for response, having those personnel continue performing that function without additional RP response is appropriate.

ERO RP response is going to be focused on ERO responders – which is what they are staffed based on. Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

# 2.2.7 [Potential RIE 2-7] Both Offsite FMTs at 90 Minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the FMT Technician/FMT Driver minimum staff ERO positions that perform the offsite field monitoring aspect of the Field Monitoring Teams function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

- An offsite FMT should be staffed, consisting of a monitor and a driver. This offsite FMT is responsible for locating, monitoring, and tracking a radioactive plume, as well as obtaining environmental samples as necessary (air, water, vegetation, etc.). This team should be staffed within 60-minutes of an Alert ECL, or greater, in order to be ready to respond to a radiological release, or to detect radiation in the field thus confirming and quantifying the release. This supports the applicable PAR decision-makers in developing effective PARs.
  - i. The monitor should be qualified to assess radiation and contamination levels, but need not be an ANSI qualified RP Technician as long as the FMT is under the direct supervision of senior staff in the TSC or EOF.
  - iii. The driver should be knowledgeable about the vehicle and the proposed routes to be traversed.
- Another offsite FMT should be staffed, consisting of a monitor and a driver. This offsite FMT is also responsible for locating, monitoring, and tracking a radioactive plume, as well as obtaining environmental samples (air, water, vegetation, etc.). This team should be staffed within 90-minutes of an Alert ECL, or greater, in order to be ready to respond to a radiological release, or to detect radiation in the field thus confirming and quantifying the release. This supports the applicable PAR decision-makers in developing effective PARs. An additional 30-minutes in response is acceptable in that this second FMT is a backup to the first FMT, and while both FMTs are expected to respond to an event to better coordinate radioactive plume tracking action(s), allowing for an additional 30-minutes provides licensees some flexibility in staffing this ERO function without compromising the reasonable assurance finding in accordance with 10 CFR 50.47(a).
  - i. The monitor should be qualified to assess radiation and contamination levels, but need not be an ANSI qualified RP Technician as long as the FMT is under the direct supervision of senior staff in the TSC or EOF.
  - iii. The driver should be knowledgeable about the vehicle and the proposed routes to be traversed.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Per the guidance of NUREG-0654, Table B-1, there should be four augmented responders at 60 minutes—two for off-site surveys, one for on-site surveys, and one for in-plant surveys. To adequately support an extension of these responders to 90 minutes, the licensee should show that the on-shift HP staffing includes a minimum of four HP technicians in total for the site. The licensee should demonstrate that two HP technicians, in excess of the number evaluated previously for extending the 30-minute responders, are available for in-plant protective actions for the other maintenance personnel that need to be added to the on-shift staffing to compensate for the extension in augmentation time for the major task of "Repair and Corrective Actions," and to perform surveys to assess any off-site release of radioactive materials.

NextEra off-site Field Monitoring Team augmentation is 90 minutes for both teams versus one team at 60 minutes and one team at 90 minutes.

FLEX equipment and strategies eliminate or prolong the onset of core damage and any radiological release of activity, and thus simplify the RP challenges and diminish the need for a 60 minute Field Monitoring Team response.

The 60 minute response basis for the first off-site Field Monitoring Team is to be ready to respond to a radiological release, or to detect radiation in the field for any ECL at an Alert or above. NextEra provides dedicated vehicles and equipment to facilitate the rapid deployment of personnel upon their arrival.

- Vehicles are maintained and fueled such that the Field Monitoring Team Driver is only required to perform a quick walk-around safety check before operating.
- Equipment/supply kit inventories are administratively maintained so that Field Monitoring Team personnel are not required to verify contents or perform lengthy equipment checks.
- Vehicles and equipment are stored together in a location that facilitates rapid deployment outside the Protected Area.
- Initial Field Monitoring Team deployment strategy locates personnel in downwind areas near the site boundary prior to a release that promptly supports EAL identification and PAR determination.

This pre-staging and readiness of Field Monitoring Team resources significantly reduces the time it takes personnel to be ready to respond to and identify a radiological release, thus also facilitating a 90 versus 60 minute augmentation response time.

On Shift impact of change from 60 to 90 minutes: FMT function not being available for offsite response at 60 minutes is covered by NEI 99-01 revision 6 EALs that incorporate "Table R-1" values, which are pre-calculated effluent monitor readings that equate to worse case release value that allows for the shift to make a determination without the need for dose assessment or FMTs.

Unmonitored releases are evaluated using in plant area radiation monitors and plant physical responses (containment pressure erratic indications, flow rates not as expected, etc.) which would trigger the operating crew to look for leaks. Direct radiation monitor readings of the unmonitored release, if needed, would be completed by competent operations staff or RP staff. On the surface this may look like an additional function on the shift staff; however, it is standard operations response to look for leaks and abnormalities as events unfold to ensure that they are in the appropriate response procedures.

Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

#### 2.2.8 [Potential RIE 2-8] OSC Supervisors at 90 minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the Lead OSC Supervisor and FIN Supervisor minimum staff ERO position that performs the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan 60-minute ERO response time requirement for the OSC Coordinator and Technical Specialist, and the NUREG-0654 R2 60-minute ERO response time guidance for the Lead OSC Supervisor.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

An Electrical Supervisor, a Mechanical Supervisor, an I&C Supervisor, and an RP Supervisor should be staffed within 90-minutes of an SAE ECL, or greater, and is typically staffed in the OSC. The OSC Supervisor can effectively manage the maintenance resources for the additional 30-minutes prior to the specific craft (mechanical, electrical, or I&C) respond, as demonstrated through drills and exercises, without compromising the staff's reasonable assurance finding in accordance with 10 CFR 50.47(a).

#### FIN Supervisor

Moving the FIN Supervisor from 60 minutes (current emergency plan) to 90 minutes (proposed emergency plan) conforms to NUREG-0654 R2.

#### Lead OSC Supervisor

Operations staff are currently trained with basic troubleshooting skills for support of all EOP and abnormal response procedure actions. Supervision of these actions are performed by the Shift Manager and Unit Supervisors regardless of augmented ERO staffing. There is no need for the ERO to relieve the shift of this responsibility.

The Flex/B.5.b process and equipment, and the operating emergency procedures (EOP, AOP, etc.), are designed to be implemented by the minimum on-shift staff. Through technological and process enhancements, the on-shift staff can cope with an event (Design Basis and Beyond Design Basis) initially without an ERO as analyzed in detail for other non-EP regulatory requirements. With FLEX/B.5.b processes and equipment codified by 10 CFR 50.155 into plant response procedures, on-shift personnel have the capability for mitigating core damage from design or beyond design basis events.

Based on this, OSC personnel are used primarily for repair activities, with operations personnel focusing on mitigating activities per the EOPs and other event procedures.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

Establishing the 90-minute augmentation requirement in the proposed emergency plan for the Lead OSC Supervisor does not impact the capability or timeliness to perform the Supervision of Repair Team Activities function.

On Shift impact of change from 60 to 90 minutes: In NUREG 0654 revision 2 table B1, the Lead OSC Supervisor during the first 30 minutes of response is dedicated to identifying any craft maintenance needs and deploying them as required to get started on repair team needs. After that time, the Craft Supervision comes in to take over the planning of repair tasks.

As described above the OSC supervision is not necessary for the initial response, the on-shift staff have the capability of performing emergency maintenance functions — overriding Air operated/ motor operated valves due to recalcitrant valve actions, breaker opening/ closing, breaker resets, and taking channels out of service that are causing protection systems to function abnormally. These tasks are part of the standard operations function and are trained/ drilled regularly through continuing training programs. The shift manager is overall in charge of operations response as stated throughout this document and this function is no different. Most of these functions are procedurally directed or can be deduced from training/ experience and directed by the control room for response. Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no staffing requirements for particular skillsets to be present in this position. As such, there are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by shift staff in adjusting the response from 60 to 90 minutes.

# 2.2.9 [Potential RIE 2-9] OSC Craft at 90 minutes

The proposed emergency plan adds 30 minutes to the augmentation response time of OSC craft minimum staff ERO positions that perform the Repair Team Activities function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

... a minimum number of maintenance personnel should respond to an event as part of the ERO, with more personnel available on an as-needed basis depending on the event. The augmentation (support) of the electrician and mechanic positions should occur within 60-minutes of an Alert ECL, (or greater), and is typically staffed in the OSC. The augmentation (support) of the I&C position should occur within 90-minutes of an Alert ECL, or greater, and is typically staffed in the OSC.

RIS 2016-10 considerations for extension of ERO augmentation times states that:

Table B-1 of NUREG-0654 calls for the addition of one "Mechanical Maintenance," one "Rad Waste Operator," and an added "Electrical Maintenance" person within 60 minutes. To adequately support an extension of the response time for these responders, the licensee should demonstrate that the responsibilities of these positions can be covered with on-shift staff or earlier responders.

Operations Emergency Operating Procedures have been developed to provide direction for a wide range of events described in the FSAR that uses operators to place the plant in a safe and stable condition. Maintenance personnel are not called upon in the response stage of an event as repair activities are taken after immediate EOP response actions.

Through equipment, process, and training enhancements the on-shift staff can initially respond to Design Basis and Beyond Design Basis (BDB) events without the support of an augmented ERO. As codified by 10 CFR 50.155, NextEra FLEX equipment provides the on-shift staff with additional resources when installed plant equipment is lost or damaged. Generally, FLEX provides portable backup equipment onsite that can be used to supplement or replace installed plant equipment in maintaining long-term core cooling, spent fuel cooling, and containment integrity. Movement of FLEX equipment, including installation into plant systems and its operations (electrical, fluid, etc.) is performed by on-shift personnel.

Due to the availability of FLEX equipment, NextEra stations have diverse protection against loss of ECCS capability and other systems, which provides a basis for determination that no immediate ECCS repair and corrective actions are likely necessary for on-shift personnel prior to augmentation of maintenance personnel. The FLEX/BDB process and equipment, and the operating emergency procedures (EOP, AOP, etc.) are designed to be implemented with the minimum shift staff. By accounting for FLEX equipment and strategies that eliminate or prolong the need for equipment and systems repair the maintenance challenges are simplified and the need for a 60 minute craft personnel response is diminished.

The NEI 10-05 based On-shift Staffing Analysis performed using the proposed emergency plan on-shift ERO identified no task overlap or overburden of the Command and Control function out to 120 minutes.

NEI 12-01, Guideline for Assessing BDB Response Staffing and Communications, assumptions that the event impedes site access as follows:

"Post event time: 6 hours – No site access. This duration reflects the time necessary to clear roadway obstructions, use different travel routes, mobilize alternate transportation capabilities (e.g., private resource providers or public sector support), etc."

As such, the limiting design for all NEE sites on-shift staffing is a response model of greater than 6 hours with no ERO response capabilities due to the event in progress. Each NEE site performed a NEI 12-01 Staffing analysis to ensure that on-shift personnel could perform all operations, FLEX and Emergency Plan functions for up to 6 hours for an extended loss of AC power resulting in a General Emergency classification with no assistance from the ERO.

On Shift impact of change from 60 to 90 minutes: In NUREG 0654, Rev. 2, Table B1, the craft function during the first 30 minutes of response is dedicated to identifying any craft maintenance needs and reporting that information to the Lead OSC Supervisor to develop priorities on repair team needs. After that time, the Craft Supervision comes in to take over the planning of repair tasks.

Shift operations staff have the capability of performing emergency maintenance functions – overriding Air operated/ motor operated valves due to recalcitrant valve actions, breaker opening/ closing, breaker resets, and taking channels out of service that are causing protection systems to function abnormally. These tasks are part of the standard operations function and are trained/ drilled regularly through continuing training programs. The shift manager is overall in charge of operations response as stated throughout this document and this function is no different. Most of these functions are procedurally directed or can be deduced from training/ experience and directed by the control room for response.

While the early identification of repair team needs will not be directly addressed by the field operations staff, the ability of the shift to perform emergency maintenance functions will identify which pieces of equipment are truly unavailable which will be reported to the Shift Manager and to the ERO through the SM/SED turnover process. Therefore, there is no undue burden on the on-shift staff for the additional 30 minutes.

While there are skills in the OSC Mechanic and OSC Electrician that are not 100% present in shift staff – the skills required for the 60 to 90 minute gap are available on shift to perform emergency maintenance functions and identify equipment that is out of service.

### 2.2.10 [Potential RIE 2-10] Security Liaison at 90 minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the Security Liaison minimum staff ERO position that perform the Security function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

**Deviation Justification:** The NUREG-0654 R2 technical basis for the ERO augmentation guidance states that:

The licensee's Security Force is controlled and maintained by the licensee's NRC-approved physical security plan and does not need to be reflected in the Emergency Plan. However, the establishment of a Security Liaison position in the TSC is advantageous to ensure effective coordination between the security force and the ERO, particularly for events where offsite resources are necessary as well as for security related events and site personnel accountability. The augmentation (support) of this function should occur within 60-minutes of an Alert ECL, or greater, and is typically staffed by a Security Liaison in the TSC to coordinate security-related activities with that of the ERO.

The site-specific Physical Security Plan (PSP) defines on-shift security staffing. This PSP staffing supports initial event response, either security or emergency plan related. The Security Shift Supervisor communicates directly with the Shift Manager informing them of security related actions and conditions. This communication does not change with the augmentation of the ERO.

Following the transfer of command and control, the Security Liaison position coordinates security and emergency related communications and response actions between the Site Emergency Director and the security force. The Security Liaison position provides communication and coordination resources that are not needed until the TSC and OSC are augmented at the 90 minute point in time.

On Shift impact of change from 60 to 90 minutes: As stated above, the PSP defines the on-shift security staff to support the initial response and the Security Liaison is not necessary until the TSC/OSC are staffed. Therefore, by aligning the Security Liaison's response time to the TSC/OSC, there is no undue burden on the on-shift staff for the additional 30 minutes.

There are no unique skills nor capabilities present in this position that are critical to site response that cannot be mitigated by security shift staff in adjusting the response from 60 to 90 minutes.

#### 2.2.11 [Potential RIE 2-11] JIC Staff at 90 minutes

The proposed emergency plan adds 30 minutes to the augmentation response time to the Site JIS Manager, Site JIS Coordinator and Remote JIS Manager minimum staff ERO position that perform the Media Information function.

The proposed emergency plan also changes the JIS Technical Liaison from a 60 minute minimum staff ERO position to a non-minimum staff ERO position.

This change deviates from the current emergency plan 60-minute ERO response time requirement.

**Deviation Justification:** The proposed emergency plan assigns 60 and 90 minute JIC/JIS staff ERO positions capable of performing the Media Information function.

The NextEra Corporate Communications and key business units maintain a staff to operate a Joint Information System (JIS) for day-to-day operations and at all emergency classification levels. The NextEra Corporate Communications and key business units respond to media and public inquiries for abnormal conditions and events at any declared emergency classification level. The NextEra Corporate Communications and key business units coordinate with site management and ERO personnel, when staffed, to respond to media inquiries. Press releases are issued as appropriate from NextEra Corporate Communications and key business units.

Establishing a 90 minute augmentation requirement for the Site JIS Manager, Site JIS Coordinator and Remote JIS Manager does not impact the capability or timeliness of the JIS to perform the Media Information function.

#### 2.2.12 [Potential RIE 2-12] Removal of Primary Responders at UE

The proposed emergency plan does not provide for call out and reporting to the station at an Unusual Event for the position assuming the Command and Control, Emergency Classifications, Communications, Supervision of Radiation Protection Staff and Site Radiation Protection, Dose Assessments / Projections, and Media Information functions from the Control Room.

This change deviates from the current emergency plan Primary Responder ERO staff requirements.

**Deviation Justification:** The current emergency plan commitment to call in several ERO positions at an Unusual Event is no longer required. Review of licensing correspondence and commitments found no regulatory requirements for these actions. Changes in the EAL Scheme, communications systems and procedures ensure that the On-Shift staff can address any Emergency Plan actions required for events classified as Unusual Events. The Station and NextEra corporate offices maintain on-call duty personnel that may be contacted to assist the shift as needed. There is no guidance in NUREG 0654 R2 that calls for calling in personnel at the Unusual Event level. ERO members will still be notified that an Unusual Event has been declared, to be prepared if a higher classification is necessary and may be called in at the discretion of the Shift Manager.

#### 3.0 ERO KEY FUNCTION ANALYSIS

Each sub-section below lists the NUREG-0654 R2 Table B-1 tasks associated with the key function; and then provides, as applicable, a staffing comparison table, Emergency Plan Change Assessment section and NUREG-0654 R2 Alignment Assessment section for the on-shift and minimum staff ERO positions.

- The Emergency Plan Change Assessment section evaluates any difference in ERO staffing between the current emergency plan and the proposed emergency plan for the key function. It includes the basis for the original and proposed staffing and justification for the change as applicable. The ERO Task Analysis provides further detail and disposition of the tasks assigned to the ERO positions.
- The NUREG-0654 R2 Alignment Assessment section evaluates any difference in ERO staffing between NUREG-0654 R2 and the proposed emergency plan for the particular key function to determine conformance. It also states whether the tasks assigned to the ERO position are aligned with the tasks specified for the key function in NUREG-0654 R2.

#### 3.1 Key Function: Command and Control

The Command and Control function includes the following NUREG-0654 R2 Table B-1 tasks:

- Provide overall ERO command and control.
- Approve emergency classification levels (ECL) and/or protective action recommendations (PAR).
- Authorize personnel dose extensions.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

#### 3.1.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Shift Manager/STED	(1) Shift Manager	(1) Operations Shift Manager

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns the Shift Manager on-shift ERO position to the Command and Control function.

The proposed NextEra Common Emergency Plan assigns the Shift Manager on-shift ERO position to the Command and Control function.

No functional changes have been made to the minimum staff ERO positions for the Command and Control function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) Operations Shift Manager for the on-shift Command and Control function.

The proposed emergency plan provides one (1) Shift Manager for the on-shift Command and Control function.

The proposed emergency plan on-shift ERO staffing level meets the NUREG-0654 R2 guidance for the Command and Control function. The major tasks are aligned with those stated in NUREG-0654 R2 guidance.

### 3.1.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Site Emergency Director	(1) Site Emergency Director	(1) Emergency Coordinator
(TSC)	(TSC)	(TSC at Alert or higher)
(1) Response Manager (EOF)	None	(1) Emergency Director (EOF
(1) Response Manager (EOF)	None	at SAE or higher)

# 1. Emergency Plan Change Assessment

At the Alert emergency classification level, The current emergency plan assigns one (1) Site Emergency Director minimum staff position in the TSC to initially assume Command and Control from the Shift Manager and one (1) Response Manager in the EOF to assume Command and Control function once the EOF is staffed and activated.

The proposed emergency plan provides for one (1) Site Emergency Director minimum staff position at the Alert emergency classification level to assume and retain overall Command and Control throughout the event.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) TSC Emergency Coordinator minimum staff ERO position at the Alert emergency classification level and one (1) EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level for the Command and Control function.

The proposed emergency plan assigns one (1) Site Emergency Director minimum staff ERO position at the Alert emergency classification to the Command and Control function.

[Potential RIE 1-1] The proposed emergency plan does not assign an EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level for the Command and Control function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Command and Control function from two (2) to one (1).

This change deviates from the current emergency plan minimum staff ERO requirements and the NUREG-0654 R2 minimum staff ERO guidance for the Command and Control function.

# 3.2 Key Function: Emergency Classifications

The Emergency Classifications function includes the following NUREG-0654 R2 Table B-1 task:

• Evaluate plant conditions and recommend emergency classifications.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

### 3.2.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Unit Supervisor	(1) Shift Classification	(1) Emergency Classification
(1) Offit Supervisor	Advisor(a)	Advisor**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Unit Supervisor as an on-shift ERO position with collateral responsibility to the Emergency Classifications function. The Emergency Classifications function can also be performed as a collateral duty by an STA qualified SRO should the SM/STED not be the STA qualified.

The proposed emergency plan assigns the Shift Classification Advisor on-shift ERO position as a collateral responsibility to the Emergency Classifications function. STAs or any SRO may be qualified to perform this function.

In the current Emergency Plan, the Classification Advisor can be performed by the Unit Supervisor, or an available SRO as needed. In the proposed emergency plan the Classification Advisor can be performed by any available SRO (such as a Unit Supervisor), as needed.

No functional changes have been made to the Classification Advisor on-shift ERO position for the Emergency Classification function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns the Classification Advisor on-shift ERO position as a collateral duty to the Emergency Classifications function.

The proposed emergency plan assigns the Classification Advisor on-shift ERO position as a collateral duty to the Emergency Classifications function.

The proposed emergency plan on-shift ERO staffing level meets the NUREG-0654 R2 guidance for the Emergency Classifications function. The major task is aligned with that stated in NUREG-0654 R2 guidance.

#### 3.2.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) TSC Operations Technician	(1) Classification Advisor-TSC	(1) TSC Emergency Classification Advisor

### 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC Operations Technician minimum staff ERO position for the Emergency Classifications function.

The proposed emergency plan provides one (1) Classification Advisor - TSC minimum staff ERO position for the Emergency Classifications function.

No functional changes have been made to the Classification Advisor minimum staff ERO position for the Emergency Classification function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) TSC Emergency Classification Advisor minimum staff ERO position for the Emergency Classifications function.

The proposed emergency plan provides one (1) Classification Advisor – TSC minimum staff ERO position for the Emergency Classifications function.

The proposed emergency plan TSC Classification Advisor minimum staff ERO position meets the NUREG-0654 R2 guidance for the Emergency Classifications function. The major task is aligned with that stated in NUREG-0654 R2 guidance.

#### 3.3 Key Function: Communications

The Communications function includes the following NUREG-0654 R2 Table B-1 task:

Communicate ECLs and PARs to OROs, including the NRC.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

#### 3.3.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) CR Communicator(a)	(1) Shift Communicator(a)	(1) Communicator**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) on-shift CR Communicator (qualified WCS or FBL) ERO position to the Communications function as a collateral duty. During emergency situations, this individual reports to the SM/STED and performs communication and notification functions as assigned. The CR Communicator will keep an open line of communication with the NRC, as requested, and should not have any other event response duties that interfere with the communicator function once this open line is established.

The proposed emergency plan assigns a Shift Communicator (typically the Shift Manager position) to the Communications function as a collateral duty.

No functional changes have been made to the on-shift ERO positions for the Communications function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns an on-shift position to the Communications function as a collateral duty.

The proposed emergency plan assigns a Shift Communicator (typically the Shift Manager position) to the Communications function as a collateral duty.

The proposed emergency plan Communicator on-shift ERO collateral duty meets the NUREG-0654 R2 guidance for the Communications function. The major task is aligned with that stated in NUREG-0654 R2 guidance.

#### 3.3.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	(1) ORO Communicator (TSC)	(1) ORO Communicator (TSC
None	(1) ORO Communicator (18C)	at Alert or higher)
(1) EOF Coordinator	None	(1) ORO Communicator (EOF
(1) EOF Coordinator	None	at SAE or higher)
(1) ENS Communicator (TSC)	(1) ENS Communicator (TSC)	(1) NRC Communicator (TSC
(1) ENS Communicator (13C)	(1) ENS Communicator (18C)	at Alert or higher)

# 1. Emergency Plan Change Assessment

# A. ORO Notifications (State/County)

The current emergency plan assigns one (1) EOF Coordinator minimum staff ERO position in the EOF at the Alert emergency classification level for the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator minimum staff ERO position at the Alert emergency classification level to the Communications function.

### B. NRC Notifications

The current emergency plan assigns one (1) TSC ENS Communicator non-minimum staff ERO position at the Alert emergency classification level for the Communications function.

The proposed emergency plan assigns one (1) TSC ENS Communicator as a minimum staff ERO position at the Alert emergency classification level for the Communications function.

### 2. NUREG-0654 R2 Alignment Assessment

### A. ORO Notifications (State/County)

NUREG-0654 R2 assigns one (1) TSC ORO Communicator minimum staff ERO position at the Alert emergency classification level and one (1) EOF ORO Communicator minimum staff ERO position at the Site Area Emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator minimum staff ERO position at the Alert emergency classification level to the Communications function.

### B. NRC Notifications

NUREG-0654 R2 assigns one (1) TSC NRC Communicator minimum staff ERO position to the ENS aspect of the Communications function.

The proposed emergency plan assigns one (1) TSC ENS Communicator minimum staff ERO position to the ENS aspect of the Communications function.

The proposed emergency plan TSC ENS Communicator minimum staff ERO position meets the NUREG-0654 R2 guidance for the ENS aspect of the Communications function.

[Potential RIE 1-2] The proposed emergency plan does not provide an EOF ORO Communicator minimum staff ERO position at the Site Area Emergency classification level for the Communications function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the ORO aspect of the Communications function from two (2) to one (1).

This change deviates from the current emergency plan minimum staff ERO position requirements and NUREG-0654 R2 minimum staff ERO position guidance for the Communications function.

### 3.4 Key Function: Supervision of RP Staff and Site Radiation Protection

The Supervision of Radiation Protection Staff and Site Radiation Protection function includes the following NUREG-0654 R2 Table B-1 tasks:

- Evaluate and assess plant and offsite radiological data in the development of onsite protective actions and offsite PARs.
- Recommend onsite protective actions and offsite PARs to the applicable decisionmaker.
- Direct all radiation protection activities, including Field Monitoring Team (FMT) direction.
- Provide relevant information to applicable communicators who are communicating offsite PARs to OROs.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

## 3.4.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Shift Manager/STED(a)	(1) Shift Manager(a)	(1) Operations Shift Manager**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

### 1. Emergency Plan Change Assessment

The current and proposed Emergency Plans assigns the Shift Manager to provide Supervision of Radiation Protection Staff and Site Radiation Protection function as an on-shift ERO collateral position.

No functional changes have been made to the on-shift ERO position for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns the Supervision of Radiation Protection Staff and Site Radiation Protection function to the Shift Manager as a collateral responsibility.

The proposed emergency plan assigns the Supervision of Radiation Protection Staff and Site Radiation Protection function to the Shift Manager as a collateral responsibility.

The proposed emergency plan meets the NUREG-0654 R2 guidance for assigning the Shift Manager position to the Supervision of Radiation Protection Staff and Site Radiation Protection function. The major tasks are aligned with that stated in NUREG-0654 R2 guidance.

### 3.4.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) HP Coordinator (TSC)	(1) TSC RP Coordinator (TSC)	(1) TSC Site Radiation Protection Coordinator (TSC at Alert or higher)
(1) Dose Assessment Specialist (EOF)	(1) EOF RP Coordinator (EOF)	(1) EOF Radiation Protection Manager (EOF at SAE or higher)

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) HP Coordinator in the TSC and one (1) Dose Assessment Specialist in the EOF minimum staff ERO positions minimum staff ERO position for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one (1) TSC Radiation Protection Coordinator and one (1) EOF Radiation Protection Coordinator minimum staff ERO positions for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The EOF Dose Assessment Specialist 60 minute ERO position in the current emergency plan initially performs the dose assessment function until full staffing occurs. At that time the EOF Dose Assessment Specialist is relieved of dose assessment responsibility by the RadDose Operator and assumes the EOF RP supervisory role. The proposed emergency plan breaks the EOF Dose Assessment Specialist into two minimum staff positions, the 90 minute EOF RP Coordinator and the 60 minute Remote Dose Assessor positions.

No functional changes have been made to the minimum staff ERO positions for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 guidance assigns one (1) TSC RP Coordinator minimum staff ERO position and one (1) EOF RP Manager minimum staff ERO position for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan assigns one (1) TSC Radiation Protection Coordinator and one (1) EOF Radiation Protection Coordinator minimum staff ERO positions for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan TSC RP Coordinator and the EOF RP Coordinator minimum staff ERO positions meet NUREG-0654 R2 guidance for the Supervision of Radiation Protection Staff and Site Radiation Protection function. The major tasks are aligned with those stated in NUREG-0654 R2 guidance.

### 3.5 Key Function: Dose Assessments / Projections

The Dose Assessments / Projections function includes the following NUREG-0654 R2 Table B-1 task:

 Perform Dose Assessments / Projections and provide input to applicable PAR decision-maker.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

### 3.5.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Shift Manager/STED(a) (1) WCS(a)	(1) Shift Dose Assessor(a)	(1) Dose Assessment / Projections Staff**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

#### 1. Emergency Plan Change Assessment

The current and proposed Emergency Plans assign the Dose Assessments / Projections function as a collateral duty performed by any qualified individual onshift.

The proposed emergency plan assigns a Dose Assessor on-shift ERO collateral duty for the Dose Assessments / Projections function, which can be performed by any qualified on-shift individual (typically, the RPT and RPQI positions are task-qualified to perform dose assessment).

Assignment of the Dose Assessment function as a collateral duty to different on-shift personnel is functionally equivalent.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 guidance identifies the on-shift Dose Assessor ERO position as a collateral duty for the Dose Assessments / Projections function.

The proposed emergency plan identifies the on-shift Dose Assessor ERO position as a collateral duty for the Dose Assessments / Projections function.

The proposed emergency plan assignment of the on-shift Dose Assessor ERO position as a collateral duty and meets NUREG-0654 R2 guidance for the on-shift Dose Assessments / Projections function. The major task is aligned with that stated in NUREG-0654 R2 guidance.

### 3.5.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Dose Assessment Specialist (EOF)	(1) Remote Dose Assessor (Remote)	(1) Dose Assessment/ Projection Staff (TSC at Alert or higher)
(1) RadDose Operator (EOF)	(1) EOF Dose Assessor (EOF)	(1) Dose Assessment/ Projection Staff (EOF at SAE or higher)

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Dose Assessment Specialist minimum staff ERO position and one (1) RadDose Operator non-minimum staff ERO position to the Dose Assessments / Projections function.

The proposed emergency plan provides one (1) Remote Dose Assessor and one (1) EOF Dose Assessor minimum staff ERO position to the Dose Assessments / Projections function.

The EOF Dose Assessment Specialist 60 minute ERO position in the current emergency plan initially performs the dose assessment function until full staffing occurs. At that time the EOF Dose Assessment Specialist is relieved of dose assessment responsibility by the RadDose Operator and assumes the EOF RP supervisory role. The proposed emergency plan breaks the EOF Dose Assessment Specialist into two minimum staff positions, the 90 minute EOF RP Coordinator and the 60 minute Remote Dose Assessor positions.

No functional change has been made to the two (2) Dose Assessment minimum staff ERO position for the Dose Assessments / Projections function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one Dose Projection Staff at the TSC and one Dose Projection Staff at the EOF as minimum staff ERO position for the Dose Assessments / Projections function. The term "Staff" would refer to sufficient personnel to perform the function. With the use of current computer based programs to collect, display and calculate radiological data the function can be performed by one individual.

The proposed emergency plan provides one (1) EOF Dose Assessor and one (1) Remote Dose Assessor minimum staff ERO positions to the Dose Assessments / Projections function.

The proposed emergency plan is consistent with the current emergency plan regarding the Dose Assessments / Projections function.

#### 3.6 Key Function: Radiation Protection

The Radiation Protection function includes the following NUREG-0654 R2 Table B-1 tasks:

- Provide qualified radiation protection coverage for responders accessing potentially unknown radiological environments during emergency conditions.
- Provide in-plant surveys.

Control dosimetry and radiologically controlled area access.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

#### 3.6.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) HP Technician	(1) RP Technician	(1) Radiation Protection
(1) THE TECHNICIAN	(1) KF Technician	Personnel
(1) Rad/Chem Technician	(1) RP Qualified Individual	(1) Radiation Protection
(1) Rad/Chem rechilician	(1) RF Qualified fridividual	Personnel

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) on-shift Health Physics Technician and one (1) on-shift Rad/Chem Technician on-shift ERO positions to the Radiological Assessment function to the Radiological Protection function.

The proposed emergency plan assigns one (1) RP Technician and one (1) RP Qualified Individual on-shift ERO positions to the Radiation Protection function.

The RP Qualified Individual will be trained to perform in-plant radiological surveys/samples, issue dosimetry and provide radiation protection coverage for responders. The current plan does not identify the qualification requirements of the onshift positions.

No functional changes have been made to the on-shift ERO positions for the Radiation Protection function.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns two (2) on-shift Radiation Protection Personnel to the Radiological Protection function.

The proposed emergency plan assigns one (1) RPT and one (1) RP Qualified Individual on-shift ERO positions to the Radiation Protection function.

The proposed emergency plan on-shift RPT and RP Qualified Individual meet the NUREG-0654 R2 guidance for the Radiation Protection function.

**[Potential RIE 1-3]** The proposed emergency plan allows collateral duty assignments to be given to radiation protection personnel when performing the Radiation Protection function. Specifically, this change allows radiation protection personnel to perform the Dose Assessment /Projections function and support other on-shift actions when not assigned a response activity.

This change deviates from the NUREG-0654 R2 on-shift staff ERO position guidance.

#### 3.6.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(6) RP Technician	(3) RP Technician	(6) Radiation Protection
(0) RE reclinician	(2) RP Qualified Individual	Technician

# 1. Emergency Plan Change Assessment

The current emergency plan provides six (6) RP Technicians as the minimum staff ERO assigned to the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals as the minimum staff ERO assigned to the Radiation Protection function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides six (6) RP Technicians as the minimum staff ERO assigned to the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals as the minimum staff ERO assigned to the Radiation Protection function.

[Potential RIE 1-4] The proposed emergency plan reduces the number and qualifications of minimum staff ERO positions for the Radiation Protection function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Radiation Protection function from six (6) in the current emergency plan and in NUREG-0654, to five (5) in the proposed emergency plan, consisting of three (3) RPTs and two (2) RP Qualified individuals that are task trained but not required to be ANSI equivalent RPTs.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

#### 3.7 Key Function: Field Monitoring Teams (FMTs)

The Field Monitoring Teams function includes the following task:

Provide onsite (out of plant) and offsite surveys.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

## 3.7.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	Not applicable

### 1. Emergency Plan Change Assessment

The current emergency plan does not assign the Field Monitoring Teams function to an on-shift position.

The proposed emergency plan does not assign the Field Monitoring Teams function to an on-shift position.

No functional changes have been made to the on-shift ERO positions for the Field Monitoring Teams function.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 does not assign the Field Monitoring Teams (FMTs) function to an on-shift position.

The proposed emergency plan does not assign the Field Monitoring Teams (FMTs) function to an on-shift position.

The proposed emergency plan is consistent with NUREG-0654 R2 guidance regarding the Field Monitoring Team function for the on-shift ERO.

### 3.7.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) RP Technician	None	<ul><li>(1) Onsite FMT Qualified individual</li><li>(1) Onsite FMT Driver</li></ul>
(2) Offsite Monitoring Personnel	(2) FM Technician	(2) Offsite FMT Qualified individual
(2) Offsite Monitoring Personnel Driver	(2) FM Driver	(2) Offsite FMT Driver

### 1. Emergency Plan Change Assessment

### A. Onsite Field Monitoring

The current emergency plan assigns one (1) RP Technician minimum staff ERO position for the onsite Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

### B. Offsite Field Monitoring

The current emergency plan assigns two (2) Offsite Monitoring Personnel and two (2) Offsite Monitoring Personnel Drivers as minimum staff ERO positions for the offsite Field Monitoring Teams function.

The proposed emergency plan provides two (2) FM Technicians and two (2) FM Drivers for minimum staff ERO positions for the Field Monitoring Teams function.

No functional change has been made to the four (4) Field Monitoring Team minimum staff ERO positions for the offsite field monitoring aspect of the Field Monitoring Teams function.

### 2. NUREG-0654 R2 Alignment Assessment

# A. Onsite Field Monitoring

NUREG-0654 R2 assigns one (1) onsite Field Monitoring Technician and one (1) Field Monitoring Technician minimum staff ERO position for the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

**[Potential RIE 1-5]** The proposed emergency plan does not staff the onsite field monitoring minimum staff ERO position for the Field Monitoring Teams function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the onsite field monitoring aspect of the Field Monitoring Teams function from two (2) to zero (0).

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO position guidance.

### 2) Offsite Field Monitoring

NUREG-0654 R2 provides two (2) offsite Field Monitoring Technicians and two (2) Field Monitoring Drivers minimum staff ERO members for the off-site Field Monitoring Teams function.

The proposed emergency plan provides two (2) offsite Field Monitoring Technicians and two (2) Field Monitoring Drivers minimum staff ERO members for the off-site Field Monitoring Teams function.

The proposed emergency plan minimum staff ERO offsite Field Monitoring Team position staffing level meets the NUREG-0654 R2 guidance for the Radiation Protection function. The major tasks are aligned with those stated in NUREG-0654 R2 guidance.

# 3.8 Key Function: Engineering

The Engineering function includes the following NUREG-0654 R2 Table B-1 tasks:

- Provide engineering coverage related to the specific discipline of the assigned engineer.
- Monitor and evaluate plant and event conditions.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

### 3.8.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Shift Manager/STED(a)	(1) Shift Technical Advisor(a)	(1) Core/Thermal Hydraulics Engineer**

- (a) Individuals assigned to these positions may have collateral duties. On-Shift Staffing Analysis confirmed that assigned individuals can adequately perform collateral functions without having competing priorities.
- \*\* Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

# 1. Emergency Plan Change Assessment

The current Emergency Plans assigns the Engineering function to the Shift Manager/STED (or SRO qualified to stand shift as STA) as a collateral responsibility.

The proposed Emergency Plans assigns the Engineering function to the Shift Technical Advisor as a collateral responsibility.

The requirement for staffing the Shift Technical Advisor position is established by the station's Tech Specs.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns the Engineering function to a Core/Thermal Hydraulics Engineer as a collateral responsibility.

The proposed emergency plan assigns the Engineering function to the Shift Technical Advisor as a collateral duty.

The proposed emergency plan Shift Technical Advisor ERO position meets the NUREG-0654 R2 guidance for the on-shift Engineering collateral duty function. The major tasks are aligned with those stated in NUREG-0654 R2 guidance.

#### 3.8.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Reactor Engineer (TSC)	(1) Reactor Engineer (Remote)	(1) Core/Thermal Hydraulics
(1) Electrical Engineer (TSC)	(1) Electrical/I&C Engineer (Remote)	(1) Electrical / Instrumentation and Control (I&C)
(1) Mechanical Engineer (TSC)	(1) Mechanical Engineer (Remote)	(1) Mechanical

....

### 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Reactor Engineer, one (1) Electrical Engineer, and one (1) Mechanical Engineer as minimum staff ERO positions for the Engineering function.

The proposed emergency plan provides one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as minimum staff ERO positions for the Engineering function.

No functional change has been made to the three (3) Engineer minimum staff ERO positions for the Engineering function.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) Nuclear Engineer, one (1) Electrical Engineer, and one (1) Mechanical Engineer as minimum staff ERO positions for the Engineering function.

The proposed emergency plan provides one (1) Reactor Engineer, one (1) Electrical Engineer, one (1) Mechanical Engineer as minimum staff ERO positions for the Engineering function.

The proposed emergency plan minimum staff ERO positions meet the NUREG-0654 R2 guidance for the Engineering function.

# 3.9 Key Function: Supervision of Repair Team Activities

The Supervision of Repair Team Activities function includes the following task:

Direct in-plant event response and repair activities.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

### 3.9.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	Not applicable

## 1. Emergency Plan Change Assessment

The current emergency plan does not assign an on-shift position to the Supervision of Repair Team Activities function.

The proposed emergency plan does not assign an on-shift position to the Supervision of Repair Team Activities function.

No functional changes have been made to the on-shift staff ERO positions for the Supervision of Repair Team Activities function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 does not assign an on-shift position to the Supervision of Repair Team Activities function.

The proposed emergency plan does not assign an on-shift position to the Supervision of Repair Team Activities function.

The proposed emergency plan is consistent with NUREG-0654 R2 guidance regarding the Supervision of Repair Team Activities function for the on-shift ERO.

# 3.9.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) OSC Coordinator	(1) Lead OSC Supervisor	(1) OSC Supervisor
(1) Technical Specialist Coordinator (OSC)	(1) FIN Supervisor	<ul><li>(1) Electrical Supervisor</li><li>(1) Mechanical Supervisor</li><li>(1) I&amp;C Supervisor</li></ul>
(1) Rad Controls Coordinator (OSC)	None	(1) RP Supervisor

## 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) OSC Coordinator, one (1) Technical Specialist Coordinator, and one (1) Rad Controls Coordinator as minimum staff ERO members for the Supervision of Repair Team Activities function.

The proposed emergency plan provides one (1) Lead OSC Supervisor and, one (1) Fix-It-Now (FIN) Supervisor as minimum staff ERO members for the Supervision of Repair Team Activities function.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) OSC Supervisor, one (1) Electrical Supervisor, one (1) Mechanical Supervisor, one (1) I&C Supervisor, and one (1) RP Supervisor as minimum staff ERO members for the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) FIN Supervisor as minimum staff ERO members to the Supervision of Repair Team Activities function.

**[Potential RIE 1-6]** The proposed emergency plan does not assign an OSC RP Supervisor minimum staff ERO position to the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan minimum staff ERO position requirements and the NUREG-0654 R2 minimum staff ERO guidance.

[Potential RIE 1-7] The proposed emergency plan does not assign OSC craft supervisors for each craft. Specifically, this change reduces the number of OSC craft supervisor minimum staff ERO positions used for the Supervision of Repair Team Activities function from three (3) to one (1).

This change deviates from the NUREG-0654 R2 minimum staff ERO guidance.

### 3.10 Key Function: Repair Team Activities

The Repair Team Activities function does not specify a major task in NUREG-0654 R2 Table B-1.

### 3.10.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
Nuclear Systems Operator**	None	Not applicable

<sup>\*\*</sup> Other personnel may be assigned this function if no collateral duties are assigned to an individual that are beyond the capability of that individual to perform at any given time. A 10 CFR Part 50, Appendix E on-shift staffing analysis must be performed to support assignment of multiple roles to individual responders on-shift.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that no maintenance personnel were called upon to perform an activity from the emergency procedures or assigned an activity from non-emergency procedures that impacted the ability of another on-shift ERO member to perform their function.

## 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Nuclear Systems Operator on-shift ERO position as a collateral duty to the Repair Team Activities function. This position may be provided by shift personnel assigned other functions.

The proposed emergency plan does not assign the Repair Team Activities function to on-shift positions.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 does not assign the Repair Team Activities function to an on-shift position.

The proposed emergency plan does not assign the Repair Team Activities function to an on-shift position.

The proposed emergency plan meets NUREG-0654 R2 guidance regarding the Repair Team Activities function for the on-shift ERO.

[Potential RIE 1-8] The proposed emergency plan does not assign an on-shift ERO position minimum staff ERO position (assigned this function if no collateral duties are assigned) to the Repair Team Activities function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Repair Team Activities function from one (1) to zero (0).

This change deviates from the current emergency plan minimum staff ERO position requirements for the Repair Team Activities function.

### 3.10.2 Minimum staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2		
(2) Electrical Maintenance	(1) Electrician	(1) Electrician		
(2) Mechanical Maintenance	(1) Mechanic	(1) Mechanic		
(1) I&C Personnel	(1) I&C Technician (1) I&C Technician			
		Additional Electrician as		
		needed		
None	None	Additional Mechanic as		
		needed		
		Additional I&C staff if needed		

## 1. Emergency Plan Change Assessment

The current emergency plan assigns two (2) Electrical, two (2) Mechanical and one (1) I&C Personnel as minimum staff ERO positions for the Repair Team Activities function.

The proposed emergency plan provides for one (1) Electrician, one (1) Mechanic and one (1) I&C Technician as minimum staff ERO positions for the Repair Team Activities function.

No functional changes have been made to the minimum staff ERO positions for the Repair Team Activities function.

The NextEra augmented ERO staffing changes align with the minimum number of personnel described in NUREG-0654 R2.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan provides one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan minimum staff ERO maintenance positions meet NUREG-0654 R2 guidance for the Repair Team Activities function.

[Potential RIE 1-9] The proposed emergency plan reduces the number of Electrical Maintenance from two (2) to one (1) and Mechanical Maintenance from two (2) to one (1) minimum staff ERO positions to the Repair Team Activities function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Repair Team Activities function from five (5) to three (3).

This change deviates from the current emergency plan minimum staff ERO position requirements.

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### 3.11 Key Function: Security

The Security function includes the following task:

 Coordinate security related activities and information with the Emergency Coordinator.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

### 3.11.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2			
(1) Security Shift Supervisor	(1) Security Shift Supervisor	Security staffing per the site-			
Security staff(b)	Security staff(b)	specific security plan.			

<sup>(</sup>b) Per the site Security Plan.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that it can be performed when needed without overlap and overburden from competing tasks.

#### 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) on-shift Security Shift Supervisor ERO position to the Security function.

The proposed emergency plan assigns one (1) Security Shift Supervisor ERO position to the Security function

No functional changes have been made to the on-shift staff ERO positions for the Security function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 specifies on-shift security staffing is per the site-specific security plan for the Security function.

The proposed emergency plan assigns one (1) on-shift Security Shift Supervisor ERO position for the Security function.

The NUREG-0654 R2 technical basis for the ERO guidance states that:

viii This note emphasizes that on-shift operations staff, security staff, and fire brigade staff (as applicable) are controlled by other non-EP processes. It is only when EP functions are assigned to on-shift staff that the requirements of 10 CFR Part 50, Appendix E, Section IV.A.9 apply, thus requiring an on-shift staffing analysis be performed.

This function has been assessed through an on-shift staffing analysis conducted in accordance with 10 CFR 50, Appendix E, Section IV.A.9, and has determined that the Security Shift Supervisor performs EP and security activities without overlap and overburden from competing tasks.

The proposed emergency plan assigns the on-shift Security Shift Supervisor to the Security function, which meets the NUREG-0654 R2 guidance for on-shift operations staff, security staff, and fire brigade staff who are assigned ERO tasks.

#### 3.11.2 Minimum staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2				
(1) Security Leader (TSC)	(1) Security Liaison (TSC)	(1) Security Liaison (TSC)				

### 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Security Leader minimum staff ERO position for the Security function.

The proposed emergency plan assigns one (1) Security Liaison minimum staff ERO position for the Security function.

No functional changes have been made to the minimum staff ERO positions for the Security function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Security Liaison minimum staff ERO position for the Security function.

The proposed emergency plan assigns one (1) Security Liaison minimum staff ERO position for the Security function.

The proposed emergency plan Security Liaison minimum staff ERO position meets the NUREG-0654 R2 guidance for the Security function. The major task is aligned with that stated in NUREG-0654 R2 guidance.

### 3.12 Key Function: Media Information

The Media Information function includes the following NUREG-0654 R2 Table B-1 task:

Manage and coordinate media information related to the event.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

#### 3.12.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2		
None	None	Not applicable		

### 1. Emergency Plan Change Assessment

The current emergency plan and proposed emergency plan do not assign an on-shift ERO position to the Media Information function.

No functional changes have been made to on-shift ERO positions for the Media Information function.

#### 2. NUREG-0654 R2 Alignment Assessment

The proposed emergency plan does not assign an on-shift Media Information ERO position or collateral duty and meets NUREG-0654 R2 guidance for the Media Information function.

### 3.12.2 Minimum staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
(1) Emergency News	(1) Site JIS Manager	JIC/JIS staff to address media
Manager(c)	(1) Site JIS Coordinator	inquiries at the Alert ECL***
(1) Corporate JIC Manager*	(1) Remote JIS Manager	Staff to perform JIC/JIS related
(1) Technical Advisors	JIS Staff (d)	tasks at SAE ECL or greater
(3) JIC Support Staff		_
Emergency Communications		
Team (ECT)*		
Nuclear Information Staff**		

<sup>\*</sup> Size of ECT based on event. The team consists of corporate communications department individuals.

- \*\* The staff of the Seabrook Station News Services Department will be assigned as needed to the corporate Joint Information Center
- (d) JIS per NextEra Communications Emergency Response Plan. Does not need to be performed in the JIC, but the JIS function needs to be established at this point.
- \*\*\* Does not need to be performed in the TSC/OSC but needs to be established at this point.

### 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Emergency News Manager, one (1) Corporate JIC Manager, one (1) Technical Advisor and three (3) JIC Support Staff minimum staff ERO positions to the Media Information function. Non-ERO JIS personnel are staffed from Seabrook Station News Services Department and NextEra Nuclear Marketing/ Communications group

The proposed emergency plan assigns one (1) Site JIS Manager, one (1) Site JIS Coordinator and one (1) Remote JIS Manager as minimum staff ERO positions to the Media Information function. Non-ERO JIS personnel staffed from NextEra Nuclear Marketing/ Communications group.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 calls for the minimum staff ERO JIC/JIS staff positions needed to address media inquiries at the Alert emergency classification level and to perform JIC/JIS related tasks at Site Area Emergency classification level.

The proposed emergency plan assigns one (1) Site JIS Manager, one (1) Site JIS Coordinator, and one (1) Remote JIS Manager as minimum staff ERO positions to the Media Information function. Non-ERO JIS personnel staffed from NextEra Nuclear Marketing/ Communications group.

The NUREG-0654 R2 technical basis for the ERO guidance states that:

While the exact staffing composition is left to the licensee to determine, with input from applicable OROs, and from the Federal Emergency Management Agency, media relations is an important part of effective emergency response and is consistent with the Joint Information System and Joint Information Center portion of NIMS. As such, the need for media support should be part of the licensee's ERO. The augmentation (support) of this function should, at a minimum, be whatever is absolutely needed to support this function, i.e., without those positions this function could not occur. This should be staffed within 60-min of an Alert ECL, or greater, to address media inquiries; and within 60 minutes of an SAE ECL, or greater, to support media related tasks.

The proposed emergency plan provides a minimum staff complement of three (3) dedicated ERO positions to coordinate with non-ERO corporate communications personnel and perform activities related to the Media Information function.

The NextEra Nuclear Marketing/ Communications group operates a Joint Information System (JIS) for day-to-day operations and at all emergency classification levels. The Nuclear Marketing/ Communications group responds to media and public inquiries for abnormal conditions and events at any declared emergency classification level. The Nuclear Marketing/ Communications group coordinates with site management and ERO personnel, when staffed, to respond to media inquiries. Press releases are issued as appropriate from the Nuclear Marketing/ Communications group.

The proposed emergency plan minimum staff ERO positions meet the NUREG-0654 R2 guidance for the Media Information function. The major task is aligned with that stated in NUREG-0654 R2 guidance.

[Potential RIE 1-10] The proposed emergency plan reduces the number of JIC Support Staff from three (3) to one (1) Site JIS Coordinator minimum staff ERO positions for the Media Information Activities function. Specifically, this change reduces the overall number of minimum staff ERO positions used for the Media Information function from six (6) to three (3).

This change deviates from the current emergency plan minimum staff ERO position requirements.

# 3.13 Key Function: Information Technology

The Information Technology function includes the following NUREG-0654 R2 Table B-1 task:

• Ensure IT equipment is operable.

The major tasks in the proposed emergency plan are aligned with the NUREG-0654 R2 guidance.

### 3.13.1 On-Shift ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2			
None	None	Not Applicable			

### 1. Emergency Plan Change Assessment

The current emergency plan and proposed emergency plan do not assign an on-shift ERO position or collateral duty for the Information Technology function.

The proposed emergency plan does not assign an on-shift position to the Information Technology function.

No functional changes have been made to on-shift ERO positions for the Information Technology function.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 guidance does not assign an on-shift position to the Information Technology function.

The proposed emergency plan does not assign an on-shift position to the Information Technology function.

The proposed emergency plan meets NUREG-0654 R2 guidance regarding the Information Technology function for the on-shift ERO.

## 3.13.2 Minimum Staff ERO

The table below identifies the staffing in the current emergency plan, proposed emergency plan and NUREG-0654 R2 guidance for this function.

Current E-Plan	Proposed E-Plan	NUREG-0654 R2
None	None	(1) TSC IT Lead* (at Alert or higher)
None	None	(1) EOF/JIC/JIS IT Lead* (at SAE or higher)

## 1. Emergency Plan Change Assessment

The current emergency plan does not assign TSC or EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

The proposed emergency plan does not assign TSC or EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

No functional changes have been made to the minimum staff ERO positions for the Information Technology function.

#### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) TSC IT Technician and one (1) EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

The proposed emergency plan does not assign TSC or EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

[Potential RIE 1-11] The proposed emergency plan does not assign IT Technicians in the TSC and EOF/JIC. Specifically, this change reduces the number of IT Technicians minimum staff ERO positions used for the Information Technology function from two (2) to zero (0).

This change deviates from the NUREG-0654 R2 minimum staff ERO position guidance for the Information Technology function.

#### 4.0 ERO AUGMENTATION ANALYSIS

Each sub-section below provides an augmentation analysis of the impact to the on-shift ERO, regarding relief of key functions, by providing an Emergency Plan Change Assessment section and NUREG-0654 R2 Alignment Assessment section for the minimum staff ERO positions.

- The Emergency Plan Change Assessment section evaluates any difference in ERO augmentation times between the current emergency plan and the proposed emergency plan for the key function. It includes the basis for the original and proposed augmentation and justification for the change as applicable.
- The NUREG-0654 R2 Alignment Assessment section evaluates any difference in ERO augmentation times between NUREG-0654 R2 and the proposed emergency plan for the particular key function to determine conformance.

### 4.1 Key Function: Command and Control

### 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Site Emergency Director 60 minute ERO position and one (1) Response Manager 60 minute ERO position at the Alert emergency classification level for the Command and Control function.

The proposed emergency plan assigns one (1) Site Emergency Director 90-minute minimum staff ERO position at the Alert emergency classification level to the Command and Control function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC Emergency Coordinator 90 minute minimum staff ERO position at the Alert emergency classification level and one (1) EOF Emergency Director minimum staff ERO position at the Site Area Emergency classification level to the Command and Control function.

The proposed emergency plan assigns one (1) Site Emergency Director 90-minute minimum staff ERO position at the Alert emergency classification level to the Command and Control function.

Removal of the EOF Response Manager minimum staff ERO position is a deviation documented in Section 3 as [Potential RIE 1-1].

[Potential RIE 2-1] The proposed emergency plan adds 30 minutes to the augmentation response time for the Site Emergency Director minimum staff ERO position that performs the Command and Control function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

### 4.2 Key Function: Emergency Classifications

## 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC Operations Technician as a 60 minute minimum staff ERO position for the Emergency Classifications function.

The current emergency plan assigns an TSC Classification Advisor as a 90 minute minimum staff ERO position for the Emergency Classifications function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC Emergency Classification Advisor 60 minute ERO position at the Alert emergency classification level for the Emergency Classifications function.

The proposed emergency plan assigns one (1) TSC Classification Advisor 90 minute minimum staff ERO position at the Alert emergency classification to the Emergency Classifications function.

**[Potential RIE 2-2]** The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC Classification Advisor minimum staff ERO position that performs the Emergency Classifications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

## 4.3 Key Function: Communications

### Emergency Plan Change Assessment

### A. ORO Notifications (State/County)

The current emergency plan assigns one (1) EOF Coordinator 60 minute position minimum staff ERO position at the Alert emergency classification level for the Communications function.

The proposed emergency plan provides one (1) TSC ORO Communicator 90 minute minimum staff ERO position for the Communications function.

## B. NRC Notifications

The current emergency plan calls for one (1) TSC ENS Communicator 60 minute minimum staff ERO positions at the Alert emergency classification level for the Communications function.

The proposed emergency plan calls for the TSC ENS Communicator to be 90 minute minimum staff ERO positions at the Alert emergency classification level for the Communications function.

### 2. NUREG-0654 R2 Alignment Assessment

### A. ORO Notifications (State/County)

NUREG-0654 R2 assigns one (1) TSC Offsite Communicator 60 minute ERO position at the Alert emergency classification level and one (1) EOF Offsite Communicator 60 minute ERO position at the Site Area Emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ORO Communicator 90 minute minimum staff ERO position to the Communications function.

### B. NRC Notifications

NUREG-0654 R2 assigns one (1) TSC NRC Communicator 60 minute minimum staff ERO position at the Alert emergency classification level to the Communications function.

The proposed emergency plan assigns one (1) TSC ENS Communicator 90 minute minimum staff ERO position at the Alert emergency classification level to the Communications function.

Removal of the EOF Offsite Communicator minimum staff ERO position is a deviation documented in Section 3 as [Potential RIE 1-2].

[Potential RIE 2-3] The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC ORO Communicator minimum staff ERO position that performs the State/County notifications aspect of the Communications function.

This change deviates from the current emergency plan 60-minute response time requirement and the NUREG-0654 R2 60-minute response time guidance.

[Potential RIE 2-4] The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC ENS Communicator minimum staff ERO position that performs the NRC notifications aspect of the Communications function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

### 4.4 Key Function: Supervision of RP Staff and Site Radiation Protection

### 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) TSC HP Coordinator 60 minute ERO position and one (1) EOF Dose Assessment Specialist 60 minute ERO position for the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan provides one (1) TSC RP Coordinator 90 minute ERO position and one (1) EOF RP Coordinator 90 minute ERO position to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The EOF Dose Assessment Specialist 60 minute ERO position in the current emergency plan initially performs the dose assessment function until full staffing occurs. At that time the EOF Dose Assessment Specialist is relieved of dose assessment responsibility by the RadDose Operator and assumes the EOF RP supervisory role. The proposed emergency plan breaks the EOF Dose Assessment Specialist into two minimum staff positions, the 90 minute EOF RP Coordinator and the 60 minute Remote Dose Assessor positions.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC RP Coordinator 60 minute ERO position at the Alert emergency classification level and one (1) EOF RP Coordinator 60 minute ERO position at the Site Area Emergency classification level to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

The proposed emergency plan provides one (1) TSC RP Coordinator 90 minute ERO position and one (1) EOF RP Coordinator 90 minute ERO position to the Supervision of Radiation Protection Staff and Site Radiation Protection function.

**[Potential RIE 2-5]** The proposed emergency plan adds 30 minutes to the augmentation response time to the TSC RP Coordinator minimum staff ERO position that performs the Supervision of Radiation Protection Staff and Site Radiation Protection function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

## 4.5 Key Function: Dose Assessments / Projections

## 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) EOF Dose Assessment Specialist 60 minute minimum staff ERO position and one (1) EOF RadDose Operator non-minimum staff ERO position for the Dose Assessments / Projections function.

The proposed emergency plan assigns one (1) Remote Dose Assessor 60-minute minimum staff ERO position and one (1) EOF Dose Assessor 90-minute minimum staff ERO positions to the Dose Assessments / Projections function.

The EOF Dose Assessment Specialist 60 minute ERO position in the current emergency plan initially performs the dose assessment function until full staffing occurs. At that time the EOF Dose Assessment Specialist is relieved of dose assessment responsibility by the RadDose Operator and assumes the EOF RP supervisory role. The proposed emergency plan breaks the EOF Dose Assessment Specialist into two minimum staff positions, the 90 minute EOF RP Coordinator and the 60 minute Remote Dose Assessor positions.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) TSC Dose Assessor 60 minute ERO position at the Alert emergency classification level and one (1) EOF Dose Assessor 60 minute ERO position at the Site Area Emergency classification level to the Dose Assessments / Projections function.

The proposed emergency plan assigns one (1) Remote Dose Assessor 60-minute minimum staff ERO position and one (1) EOF Dose Assessor 90-minute minimum staff ERO positions to the Dose Assessments / Projections function.

Response for the EOF Dose Assessor at 90 minutes from the Alert emergency classification level is comparable to a 60 minute response from a Site Area Emergency classification level, if not sooner for all realistic events.

The proposed emergency plan meets the NUREG-0654 R2 60 and 90-minute augmentation guidance for the Dose Assessments / Projections function.

### 4.6 Key Function: Radiation Protection

#### 1. Emergency Plan Change Assessment

The current emergency plan provides six (6) RP Technician 60 minute minimum staff ERO positions for the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals to a 90 minute minimum staff ERO position for the Radiation Protection function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides three (3) RP Technicians to a 60 minute ERO position and three (3) RP Technicians to a 90 minute ERO position for the Radiation Protection function.

The proposed emergency plan provides three (3) RP Technicians and two (2) RP Qualified Individuals to a 90 minute minimum staff ERO position for the Radiation Protection function.

Removal of one (1) minimum staff radiation protection personnel is a deviation documented in Section 3 as [Potential RIE 1-4].

[Potential RIE 2-6] The proposed emergency plan adds 30 minutes to the augmentation response time to the radiation protection personnel minimum staff ERO positions that perform the Radiation Protection function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

### 4.7 Key Function: Field Monitoring Teams (FMTs)

# 1. Emergency Plan Change Assessment

#### A. Onsite Field Monitoring

The current emergency plan assigns one (1) RP Technician 60 minute minimum staff ERO position to the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

## B. Offsite Field Monitoring

The current emergency plan assigns two (2) Offsite Monitoring Personnel and two (2) Offsite Monitoring Personnel Drivers as 60 minute minimum staff ERO positions for the Field Monitoring Teams function.

The proposed emergency plan assigns two (2) Field Monitoring Technicians and two (2) Field Monitoring Drivers as 90 minute minimum staff ERO positions to the Field Monitoring Teams function.

## 2. NUREG-0654 R2 Alignment Assessment

### A. Onsite Field Monitoring

NUREG-0654 R2 assigns one (1) onsite Field Monitoring Technician and one (1) onsite Field Monitoring Driver to a 60 minute minimum staff ERO position the onsite Field Monitoring aspect of the Field Monitoring Teams function.

The proposed emergency plan does not assign minimum staff ERO personnel to the onsite field monitoring aspect of the Field Monitoring Teams function.

#### B. Offsite Field Monitoring

NUREG-0654 R2 assigns one (1) offsite Field Monitoring Technician 60 minute ERO position and one (1) Field Monitoring Driver 60 minute ERO position for the Field Monitoring Teams function.

NUREG-0654 R2 assigns one (1) offsite Field Monitoring Technician 90 minute ERO position and one (1) Field Monitoring Driver 90 minute ERO position for the Field Monitoring Teams function.

The proposed emergency plan assigns (2) Field Monitoring Technicians and two (2) Field Monitoring Drivers as 90 minute minimum staff ERO to the Field Monitoring Teams function.

Removal of one (1) minimum staff RP Technician and one (1) Driver from the onsite field monitoring aspect of the Field Monitoring Teams function is a deviation documented in Section 3 as [Potential RIE 1-5].

[Potential RIE 2-7] The proposed emergency plan adds 30 minutes to the augmentation response time to the FMT Technician/FMT Driver minimum staff ERO positions that perform the offsite field monitoring aspect of the Field Monitoring Teams function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

### 4.8 Key Function: Engineering

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Reactor Engineer, one (1) Electrical Engineer, and one (1) Mechanical Engineer as 60 minute minimum staff ERO positions for the Engineering function.

The proposed emergency plan provides one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as 60 minute minimum staff ERO positions for the Engineering function.

The proposed emergency plan is consistent with the current emergency plan regarding the Engineering function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) Nuclear Engineer, one (1) Electrical Engineer, and one (1) Mechanical Engineer 60 minute ERO positions to the Engineering function.

The proposed emergency plan assigns one (1) Reactor Engineer, one (1) Electrical/I&C Engineer, and one (1) Mechanical Engineer as 60 minute minimum staff ERO positions to the Engineering function.

The proposed emergency plan is consistent with the NUREG-0654 R2 guidance regarding the Engineering function.

### 4.9 Key Function: Supervision of Repair Team Activities

### 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) OSC Coordinator, one (1) Technical Specialist, and one (1) Rad Controls Coordinator 60 minute minimum staff ERO positions for the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) Fix-It-Now (FIN) Supervisor 90 minute minimum staff ERO positions for the Supervision of Repair Team Activities function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) 60 minute OSC Supervisor, one (1) 90 minute Electrical Supervisor, one (1) 90 minute Mechanical Supervisor, one (1) 90 minute I&C Supervisor, and one (1) 90 minute RP Supervisor ERO positions for the Supervision of Repair Team Activities function.

The proposed emergency plan assigns one (1) Lead OSC Supervisor and one (1) FIN Supervisor as 90 minute minimum staff ERO positions to the Supervision of Repair Team Activities function.

Removal of OSC RP Supervisor from the Supervision of Repair Team Activities function is a deviation documented in Section 3 as [Potential RIE 1-6].

Removal of OSC supervisors for each craft from the Supervision of Repair Team Activities function is a deviation documented in Section 3 as [Potential RIE 1-7].

[Potential RIE 2-8] The proposed emergency plan adds 30 minutes to the augmentation response time to the Lead OSC Supervisor and FIN Supervisor minimum staff ERO position that performs the Supervision of Repair Team Activities function.

This change deviates from the current emergency plan 60-minute ERO response time requirement for the OSC Coordinator and Technical Specialist, and the NUREG-0654 R2 60-minute ERO response time guidance for the Lead OSC Supervisor.

### 4.10 Key Function: Repair Team Activities

# 1. Emergency Plan Change Assessment

The current emergency plan assigns two (2) Electrical Maintenance, two (2) Mechanical Maintenance, and one (1) I&C Personnel as 60 minute minimum staff ERO positions for the Repair Team Activities function.

The proposed emergency plan assigns one (1) Mechanic, one (1) Electrician and one (1) I&C Technician as 90 minute minimum staff ERO positions to the Repair Team Activities function.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns one (1) 60 minute Electrician, one (1) 60 minute Mechanic, and one (1) 90 minute I&C Technician minimum staff ERO positions to the Repair Team Activities function.

The proposed emergency plan assigns one (1) Electrician, one (1) Mechanic, and one (1) I&C Technician as 90 minute minimum staff ERO positions to the Repair Team Activities function.

Removal of one (1) Electrician and one (1) Mechanic from Repair Team Activities function is a deviation documented in Section 3 as [Potential RIE 1-9].

**[Potential RIE 2-9]** The proposed emergency plan adds 30 minutes to the augmentation response time of OSC craft minimum staff ERO positions that perform the Repair Team Activities function.

This change deviates from the current emergency plan 60-minute ERO response time requirements and the NUREG-0654 R2 60-minute ERO response time guidance.

### 4.11 Key Function: Security

## 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Security Leader 60 minute minimum staff ERO position for the Security function.

The proposed emergency plan provides one (1) Security Liaison 90-minute minimum staff ERO position for the Security function.

## 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) Security Liaison 60 minute ERO position for the Security function.

The proposed emergency plan provides one (1) Security Liaison 90-minute minimum staff ERO position for the Security function.

**[Potential RIE 2-10]** The proposed emergency plan adds 30 minutes to the augmentation response time to the Security Liaison minimum staff ERO position that performs the Security function.

This change deviates from the current emergency plan 60-minute ERO response time requirement and the NUREG-0654 R2 60-minute ERO response time guidance.

# 4.12 Key Function: Media Information

# 1. Emergency Plan Change Assessment

The current emergency plan assigns one (1) Emergency News Manager, one (1) Corporate JIC Manager, one (1) Technical Advisor and three (3) JIC Support Staff 60 minute minimum staff ERO positions to the Media Information function. Non-ERO JIS personnel are staffed from Seabrook Station News Services Department and NextEra Nuclear Marketing/ Communications group.

The proposed emergency plan provides JIC/JIS staff ERO positions capable of responding to media and public inquiries for abnormal conditions and events at any declared emergency classification level within 60 minute.

The proposed emergency plan assigns one (1) Site JIS Manager, one (1) Site JIS Coordinator, and one (1) Remote JIS Manager as 90 minute minimum staff ERO positions to the Media Information function. The proposed emergency plan also changes the JIC JIS Technical Liaison from a 60 minute minimum staff ERO position to a non-minimum staff ERO position. Non-ERO JIS personnel are staffed from NextEra Nuclear Marketing/ Communications group.

Removal of two (2) JIC Support Staff minimum staff ERO positions is a deviation documented in Section 3 as **[Potential RIE 1-10]**.

[Potential RIE 2-11] The proposed emergency plan adds 30 minutes to the augmentation response time to the Site JIS Manager, Site JIS Coordinator and Remote JIS Manager minimum staff ERO position that perform the Media Information function.

The proposed emergency plan also changes the JIS Technical Liaison from a 60 minute minimum staff ERO position to a non-minimum staff ERO position.

This change deviates from the current emergency plan 60-minute ERO response time requirement.

### 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 assigns 60 and 90 minute JIC/JIS staff ERO positions capable of performing the Media Information function.

The proposed emergency plan assigns 60 and 90 minute JIC/JIS staff ERO positions capable of performing the Media Information function.

The proposed emergency plan meets the NUREG-0654 R2 60 and 90 minute augmentation guidance for the Media Information function.

### 4.13 Key Function: Information Technology

### 1. Emergency Plan Change Assessment

The current emergency plan does not provide an TSC IT Technician or an EOF IT Technician minimum staff ERO position for the Information Technology function.

The proposed emergency plan does not provide an TSC IT Technician or an EOF IT Technician minimum staff ERO position for the Information Technology function.

No functional changes have been made to the minimum staff ERO positions for the Information Technology function.

# 2. NUREG-0654 R2 Alignment Assessment

NUREG-0654 R2 provides one (1) 90 minute TSC IT Technician and one (1) 90 minute EOF/JIC IT Technician minimum staff ERO positions for the Information Technology function.

The proposed emergency plan does not provide an TSC IT Technician or an EOF IT Technician minimum staff ERO position for the Information Technology function.

Use of remote IT support in the emergency response facilities for the Information Technology function is a deviation documented in Section 3 as [Potential RIE 1-9].

## 4.14 Seabrook Station Primary Staff ERO Staffing Augmentation Time

The current Seabrook Station Emergency Plan designates a group of eight (8) Primary Responders that are staffed on a rotating duty basis. During an Unusual Event, the Primary Responders are notified to assist the on-shift staff with the emergency response. Primary Responders are:

- Site Emergency Director
- Operations Technician
- Technical Services Coordinator
- Health Physics Coordinator
- Response Manager\*
- EOF Coordinator\*
- ERO Technical Liaison
- Emergency News Manager

<sup>\*</sup> Not required to report to the station

The Shift Manager/Short Term Emergency Director (STED) will transfer overall management responsibility to the arriving Site Emergency Director. The Site Emergency Director will relieve the STED of emergency response command and control duties. The Response Manager will obtain a briefing from the Site Emergency Director or STED prior to or after reporting to an appropriate onsite or offsite reporting location. The Response Manager will notify Seabrook Station executive management. The EOF Coordinator and the Emergency News Manager will obtain a briefing from the Response Manager. The Emergency News Manager reports to the Seabrook Station site to coordinate public information needs.

No Station emergency response facilities are automatically activated during an Unusual Event, although the Site Emergency Director may, at his discretion, activate any or all facilities.

Following an Alert or higher emergency declaration, Primary, Subject-to-Call and Secondary Responders will be notified by pager, and all emergency response facilities will be activated.

The proposed emergency plan will eliminate the Primary Responder ERO staff positions reporting requirements at the Unusual Event classification level.

[Potential RIE 2-12] The proposed emergency plan does not provide for call out and reporting to the station at an Unusual Event for the position assuming the Command and Control, Emergency Classifications, Communications, Supervision of Radiation Protection Staff and Site Radiation Protection, Dose Assessments / Projections, and Media Information functions from the Control Room.

This change deviates from the current emergency plan Primary Responder ERO staff requirements.

#### 5.0 NON-MINIMUM STAFF ERO STAFFING

The current emergency plan and implementing procedures describe the required minimum staff ERO (i.e., if any position is not staffed, then the emergency plan cannot be effectively implemented). The current implementing procedures also contains trained and qualified non-minimum staff ERO positions that are available to assist the minimum staff ERO (for tasks such as administration, communications, coordination, and logistics).

By procedure, the non-minimum staff ERO positions are called out at the same time as minimum staff ERO positions. NextEra uses an all-call notification method, where all individuals qualified to fill an ERO position are notified and expected to respond to their assigned facilities. The presence of the non-minimum staff ERO positions is not required to activate the respective ERFs.

NUREG-0654 R2 guidance does not discuss non-minimum staff ERO positions. In NUREG-0654 R2 guidance, Table B-1, Note iii addresses the required minimum staffing as compared to other staff not critical to the effective Emergency Plan implementation. Note iii states:

The minimum ERO staffing plan is that which is required to effectively implement the site-specific emergency plan (i.e., the emergency plan cannot be effectively implemented without this staff). The emergency plan should describe the minimum ERO staffing plan, while supporting implementing procedures can describe any other staff response desired by the licensee as long as this staff is not critical to effective emergency plan implementation. The augmentation times listed are intended to provide a model for applicants and licensees to consider in the development of their site-specific emergency plan.

The intent of this note is to emphasize the distinction between minimum staff ERO positions required to implement the emergency plan and non-minimum staff ERO positions that provide assistant but are not essential to the response activities.

Several non-minimum staff ERO positions remain in the implementing procedures and will continue to be notified and respond at an Alert or higher emergency classification level, at the same time as the minimum staff ERO; however, the non-minimum staff ERO positions are not required to be present to activate the Emergency Response Facilities (ERFs) or relieve the on-shift ERO of any EP responsibilities.

The table below identifies the current minimum and non-minimum staff ERO positions, by facility, in comparison to the proposed minimum and non-minimum staff ERO positions. The positions have been dispositioned as follows:

Current E-Plan / Procedures	Proposed E-Plan	Disposition
TSC		
Site Emergency Director	Site Emergency Director	No Change
HP Coordinator	TSC RP Coordinator	Title Change
	ORO Communicator	New Minimum Staff Position
ENS Communicator	ENS Communicator	Changed from non-minimum to
		minimum staff ERO position
Engineering Coordinator		Minimum Position Eliminated
Mechanical Engineer	Mechanical Engineer	Remote position
Electrical Engineer		
Reactor Engineer	Reactor Engineer	Remote position
Nuclear Safety Advisor		Non-Minimum Position Eliminated
Electrical Support Engineer		Non-Minimum Position Eliminated
I&C Support Engineer		Non-Minimum Position Eliminated
NSSS Support Engineer		Non-Minimum Position Eliminated

Current E-Plan / Procedures	Proposed E-Plan	Disposition
BOP Support Engineer	<u> </u>	Non-Minimum Position Eliminated
Security Leader	Security Liaison	Title Change/ Changed from non-
		minimum to minimum staff ERO
		position
Emergency Operations	TSC Classification Advisor	Changed from non-minimum to
Manager		minimum staff ERO position/Title
		Change
Maintenance Coordinator		Minimum Position Eliminated
TSC Work Control Supv		Non-Minimum Position Eliminated
·	TSC ERF Communicator	New Non-Minimum Staff Position
Operations Technician		Minimum Position Eliminated
Technical Services	TSC Coordinator	Changed from minimum to non-
Coordinator		minimum staff ERO position/Title
		Change
TSC Logkeeper		Non-Minimum Position Eliminated
Assembly Area Coordinator		Non-Minimum Position Eliminated
OSC		Trent imminiant i content Emininated
OSC Coordinator	Lead OSC Supervisor	Title Change
Technical Specialist	FIN Supervisor	Title Change
Coordinator	I IN Supervisor	The Change
Work Control Supervisor		Non-Minimum Staff Position Eliminated
MM/MV Work Planner		Non-Minimum Staff Position Eliminated
ME/IC Work Planner		
	DD T	Non-Minimum Staff Position Eliminated
RP Technician	RP Technician	No Change
	RP Qualified Individual	Title Change (training changed)
Mechanical Maintenance	Mechanic	Title Change
Electrical Maintenance	Electrician	Title Change
I&C Personnel	I&C Technician	Title Change
Chemistry Technician		Not included in NUREG-0654 E-Plan
		unless assigned EP tasks
Rad Controls Coordinator		Minimum Position Eliminated
Chemistry Coordinator		Minimum Position Eliminated
CR Operator – OSC	OSC ERF Communicator	Title Change
Communicator		
Storekeeper		Non-Minimum Position Eliminated
Specialty Technical Assistant		Non-Minimum Position Eliminated
EOF		
Response Manager		Minimum Position Eliminated
EOF Coordinator	EOF Manager	Title Change
Admin Services Coordinator	Admin Coordinator	Changed from minimum to non-
		minimum staff ERO position/Remote
		position/Title Change
D 4 10 111	EOF RP Coordinator	Title Change (now 2 positions)
Dose Assessment Specialist	Remote Dose Assessor	Title Change (now 2 positions)
Radiation Assistant		Non-Minimum Position Eliminated
Dose Assessment Personnel		Non-Minimum Position Eliminated
RadDose Operator	EOF Dose Assessor	Title Change/ Changed from non-
		minimum to minimum staff ERO
		position
Dosimetry Records Personnel		Non-Minimum Position Eliminated
Environmental Analyst		Non-Minimum Position Eliminated
Offsite Monitoring Coordinator		Minimum Position Eliminated
Offsite Monitoring Personnel	FMT Technician	Title Change
Offsite Monitoring Personnel	FMT Driver	Title Change
	I WI DIVE	Title Change
Driver		

Current E-Plan / Procedures	Proposed E-Plan	Disposition
Offsite Monitoring		Non-Minimum Position Eliminated
Communicator		
Technical Assistant		Minimum Position Eliminated
ERO Technical Liaison		Minimum Position Eliminated
Materials & Logistics		Non-Minimum Position Eliminated
Coordinator		
	Resource Coordinator	New Non-Minimum Staff Remote
		Position
HPN Communicator		Non-Minimum Position Eliminated
Licensing Coordinator		Non-Minimum Position Eliminated
Industry Liaison		Non-Minimum Position Eliminated
ERO Support Staff		Non-Minimum Position Eliminated
Information Management	IT Support	Non-Minimum Position provided by IT
Specialist		Help desk
Security Coordinator		Non-Minimum Position Eliminated
Security Personnel		Non-Minimum Position Eliminated
EOF Access Control		Non-Minimum Position Eliminated
Officer/Personnel		
Training Center Staff		Non-Minimum Position Eliminated
State EOC Technical Liaisons	State Liaison	Title Change
JIC/JIS		
Emergency News Manager	Site JIS Manager	Title Change
JIC Support Staff	Site JIS Coordinator	Title Change
Technical Advisor	JIS Technical Liaison	Title Change/ Changed from minimum
		to non-minimum staff ERO position
	Media Coordinator	New Non-Minimum Staff Position
Corporate JIC Manager	Remote JIS Manager	Remote Minimum Position/Title
		Change
News Services Support Staff		Non-Minimum Position Eliminated
Emergency Communications	Emergency Communications	Non-ERO Positions/Support JIS
Team	Team	functions provided by corporate
		personnel as part of normal duties

Note: Shaded position are non-minimum staff ERO positions

Each EP task assigned to the minimum and non-minimum staff ERO positions in the current emergency plan is evaluated and dispositioned in Analysis Report #1, ERO Task Analysis.

		NUREG-0654 R2		Curren	t E-Plan	Proposed E-Plan				
			Alert	_			Alert		7	Alert
Function	Position Title	Shift	60 Min	l.		Shift	60 Min	Shift	60 Min	90 Min
	Unit Supervisor					1				
Plant Systems	Reactor Operator					2	,			
Operations	Nuclear System Operator					2				
	Work Control Supervisor					1			Alert 60 Min 90	
	Shift Manager	1				1		1		
	Site Emergency Director (TSC)		1				1			1
Facility Control	EOF Manager (EOF)				1		1			1
	Response Manager (EOF)						1			
Emergency Classifications	Classification Advisor (CR/TSC)	1(a)				1(a)		1(a)		1
	Shift Communicator	1(a)				2		1(a)		
Communications	ORO Communicator (TSC)		1							1
	ENS Communicator (TSC)		1							1
	Shift Manager	1(a)				1(a)		1(a)		
Supervision RP Activities	TSC RP Coordinator (TSC)		1				1			1
Supervision RP Activities	EOF RP Coordinator (EOF)				1		1			1
	Offsite Monitoring Coordinator (EOF)						1			
Dose Assessments /	Shift Dose Assessor	1(a)				1(a)		1(a)		
Projections -	EOF Dose Assessor (EOF)		1							1
	Remote Dose Assessor			_			1(a)		1	
Radiation Protection	RP Technician	2	3	3		2	6	1		3
	RP Qualified Individual							1		2
	Onsite FMT Technician		1				1			
Field 88 coltector of Televis	Onsite FMT Driver		1				1			
Field Monitoring Teams	Offsite FMT Technician (EOF)		1	1			2			2
	Offsite FMT Driver (EOF)		1	1			2			2
	STA	1(a)				1(a)		1(a)		
	Operations Technician (TSC)						1	***************************************		
	Engineering Coordinator (TSC)						1			
Engineering and Plant	Technical Services Coordinator (TSC)						1			
Monitoring	Technical Assistant (EOF)						1			
	ERO Technical Liaison (EOF)						1			
	Electrical/I&C Engineer (Remote)		1				1		1	
	Mechanical Engineer (Remote)		1				1		1	
	Reactor Engineer (Remote)		1				1		1	

		NUREG-0654 R2				Current E-Plan		Proposed E-Plan		
			Alert	Alert	SAE		Alert		Alert	Alert
Function	Position Title	Shift	60 Min	90 Min	60 Min	Shift	60 Min	Shift	60 Min	90 Min
Supervision of Repair Team Activities	Lead OSC Supervisor (OSC)		1				1			1
	FIN Supervisor (OSC)						1			1
	Electrical Supervisor (OSC)			1						
	Mechanical Supervisor (OSC)			1						
	I&C Supervisor (OSC)			1						
	RP Supervisor (OSC)			1			1			
	Maintenance Coordinator (TSC)						1			
	Radiation Controls Coordinator (OSC)						1			
	Chemistry Coordinator (OSC)						1			
Repair Team Activities	Electrician (OSC)		1				2			1
	Mechanic (OSC)		1				2			1
	I&C Technician (OSC)			1			1			1
	Chemistry Technician (OSC)						1			N/A
Security	Security Shift Supervisor					1		1		
	Security Force	(b)				(b)		(b)		
	Security Liaison (TSC)		1							1
Media Information	JIS / JIC Staff		(c)		(c)		(c)			
	Site JIS Manager (Site)						1(c)			1
	Site JIS Coordinator (Site)						2(c)			1
	Remote JIS Manager (Remote)									1
Information Technology	IT Coordinator (TSC)			1						(d)
(IT)	IT Coordinator (EOF)				1					(d)
ERO Totals – Full Breakdown			20	11	3	6 <sup>(e)</sup>	41	4	4	26
ERO Totals – On-shift and Minimum Staffing				34				4		0
ERO Totals – All Required Positions Filled			37			47		34		

- (a) These positions are collateral duties. Positions assigned to the collateral duties can perform their assigned tasks without overlap or overburden.
- (b) Per the site Security Plan.
- (c) JIS function established at this point. Activation of the JIC is coordinated with the offsite agencies and carries no time requirement.
- (d) IT personnel monitor critical digital assets remotely and respond any time an issue is identified.
- (e) Current Plan Figure 8.15 includes 5 operations personnel required be T.S. but with no specific emergency plan duties. Positions not counted in this table for total ERO positions.